

RÉPUBLIQUE ARABE D'ÉGYPTE

MINISTÈRE DE LA CULTURE ET INFORMATION

SERVICE DES ANTIQUITÉS DE L'ÉGYPTE

ANNALES
DU SERVICE DES ANTIQUITÉS
DE L'ÉGYPTE



TOME LXIII

LE CAIRE
Organisme Général
des Imprimeries Gouvernementales
1979

ANNALES DU SERVICE DES ANTIQUITÉS DE L'ÉGYPTE. - Tome LXIII

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MELANGES SELIM HASSAN
II



Selim Hassan in the tomb of Ny ʿankh-ba at Saqqara



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NOTE

The idea of celebrating the memory of Selim Hassan began in 1965(1), renewed in 1970-1971(2), and fulfilled in 1972. Some of the articles of Mélanges Selim Hassan I, were delivered in 1971 specially for this occasion(3).

With being responsible for going with editing this volume, after the resignation of Dr. Zaky Iskander (4), I found it more convenient to divide the material into two volumes (62 & 63) with adding some of the articles newly in hand (5). Thus through this year will appear two volumes of our Annales, after long absence, commemorating Selim Hassan. The coming volume will be dedicated to the memory of Ahmed Kamal Pacha and still there is an opportunity for sharing in such an occasion. Thanks.

Cairo, 1977. DIA' ABOU-GHAZI

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(1) In that time it was decided to commemorate E.Drioton, S. Hassan, P. Lacau as famous triad in the history of the Antiquities Department, but faded with the changes that happened in the Department in that time. see RA. 1965/II, p. 219.

(2) The Ministry of Culture has adopted this idea in the time of the ex. Minister Badr Abou-Ghazi.

(3) Those of Dr. Hassan Kamal, prof. Dr. J. Irmscher, Dr. P. Ghalioungui, Dr. A.H. Zayed and mine.

(4) On 16 June 1972. Since then the volume was handed to the Press.

(5) Those of Dr. I. Badawy., Mrs. A. Nibbi, Otto Schaden, Z. Iskander — J. Harris — Sh. Farid and mine.

DISCOVERIES OF SELIM HASSAN AT SAQQARAH (1)

BY

DIA' ABOU-GHAZI

A) Addenda to ASAE, LVIII, p. 82-83 (B).

Owing to the recent appearance of the Excavations of Selim Hassan, at Saqqarah(2), it is convenient to give here a full account of the discovered tombs which was unavailable to me when I wrote on his excavation in the up mentioned article. This account incorporates four of the tombs mentioned in this article (Nos. 166-168 and 170) plus 13 new ones. Those of and remain unpublished (3) :

Vol-I(4)

1) The mastaba of Neb-Kaw-Ḥer. south the enclosure wall of the Step Pyramid. (VI dyn). originally built for Akhet-Ḥotep. (No. 168)

Vol-2(5)

(2) The mastaba of called also to the north of the causeway of Wenis and to the south-east of No. 10. A rock-cut mastaba VI dyn. (No. 167). p. 1-23.

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(1) Assistance Zakaria Ghoneim. Reis of excavations. Mr. Kamil Saddik. Photographer M. Shadduf. Drawings and hieroglyphic index by Mrs. Dorothy Eady (Exc. at Saqqarah I, p. VII) Cairo, 1975.

(2) Excavations at Saqqara, 1937-1938, 3 vols.—Cairo 1975.

(3) No-165 & 169 in the referred article.

(4) The mastaba of Neb-Kaw Ḥer = Excavations at Saqqara 1932-1938. — Cairo, 1975.

(5) Mastabas of Ny-ʿankh-Pepy and others = Excavations at Saqqara, 1937-1938, vol. II.—Cairo. 1975.

(3) The Mastaba of (Ptaḥ-ḥotep. 1). to the north of that of Ptaḥ-ḥotep II (35. 40 × 19.30 m. H. 4.85 m.) p. 25—61.

(4) The mastaba of (Ptaḥ-ḥotep II) lies to the south-east of that of Ptaḥ-ḥotep-1 (No. 3) : Discovered partly by Mariette (Mastabas, p. 359) published almost completely by Davies (The mastabas of Ptah-ḥotep and Akhet-ḥotep exclusive shaft, 3; the sloping passage of the burial-chamber of Akhet-ḥotep published by Selim Hassan, Saqqara II, p. 63—84.

(5) The mastaba of lies to the north-east of the mastaba of Ptaḥ-ḥotep II, to the east of that of Ptaḥḥotep I. p. 85—104.

(6) The mastaba of lies to the south-east of that of Ptaḥ—ḥotep II. p. 105—113.

(7) The mastaba of . It lies to the north-east of the mastaba of Ptaḥ-ḥotep II, and south-east of that of Ptaḥ-ḥotep I. p. 115—116.

Vol. III(1)

(8) The mastaba of Ḥemet-Raᶜ (good name) lies to the east of that of Ptaḥ-ḥotep II. (4, 6 ×4.4 m.) p. 1—10.

(9) The mastaba of shaft No. 2 (Thefw) lies to the north-west of that of Ptaḥ-ḥotep II and to the south of that of Ptaḥ-ḥotep I (6×4.95×2.20 m) p. 11—13.

(10) The rock cut mastaba of Akhet-Ḥotep lies to the east of the mastaba of shaft No. 14 p. 15—20.

(1) Mastabas of princess Ḥemet-Reᶜ and others = Excavations at Saqqara, 1937-1938 (Cairo 1975).

(11) The mastaba of shaft No. 14 lies to the east of that of Ptaḥ-ḥotep II. p. 21—24.

(12) The mastaba of Mereri lies to the north of the mastaba of Ptaḥ-ḥotep II. and to the east of that of Ptaḥ-ḥotep I. p. 23—39.

(13) The mastaba of lies to the north of the causeway of Wenis 32.6×18.90 h. 2.40 m. (No. 168) p. 41—48.

(14) The mastaba of situated to the north of the causeway of Wenis. 10.55 × 8.50 m. h. 2.06 m (now) p. 49—51.

(15) The mastaba of situated to the north of the causeway of Wenis (No. 170) p. 53—58.

(16) The rock-cut mastaba of to the north of the causeway of Wenis, p. 59—67.

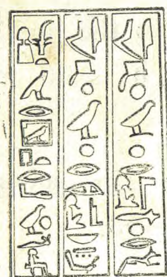
(17) The rock-cut mastaba of good name lies to the north of the causeway of Wnis p. 69—81.

B) Ḫw.f- Raᶜ in Cairo Museum J.E 93164.

Some years age the Pyramid's Laboratory received several wooden statues from the inspectorate of Saqqarah for restoration. By the resignation of Mr. Ahmed Yossuf he gave this work up to the Museum Laboratory. Among such statues was that of Ḫw.f-Raᶜ skilfully restored in 1975 and added to the Museum Collection under No. JE. 93164 (24.11.1975)

Ḫw.f- Reᶜ wooden painted statue is one of the objects discovered by Selim Hassan in Ḫw.f. Reᶜ tomb-serdab

season 1937—1938 (Saqqarah) (1) (pl. I). It represents Ḫw.f. Reᶜ standing on a wooden pedestal striding forward, holding stick in his left. (restored). His right arm following the body with hand clenched, once held a ḫrp baton (2), putting a curled black wig; coloured collar, only a part remaining and a short white kilt held to his waist by a tri-coloured(3) belt. Fronting his right foot three vertical lines of hieroglyphics giving funerary titles as well as his civil ones, from which we know that he was a distinguished man who attained a first place under the king and administred the judgment hall. It runs as follows :



The honoured one in the presence of the great god and in the presence of Osiris lord of the sacred land, the First under the king, the overseer of the Judgment hall, Reᶜ-khu. f.

According to the funerary titles, we can date it back to the time of the vth dynasty.

The statue as a whole is 88 cm Ht., in good preservation with defects on shoulders, neck, legs, and kilt. (pl. II).

The natural colours give the statue a good realistic look.

Bibliography: JE. 93164 ; II 18270 (24-11-1975); Saqqarah 10694 ; Guide No. 6371 (editions 1976, 1978 & photo).
Selim Hassan, ASAE, XXXVIII, p. 506;
Exc. at Giza V (1944) p. 46, pl. VIII (in situ).

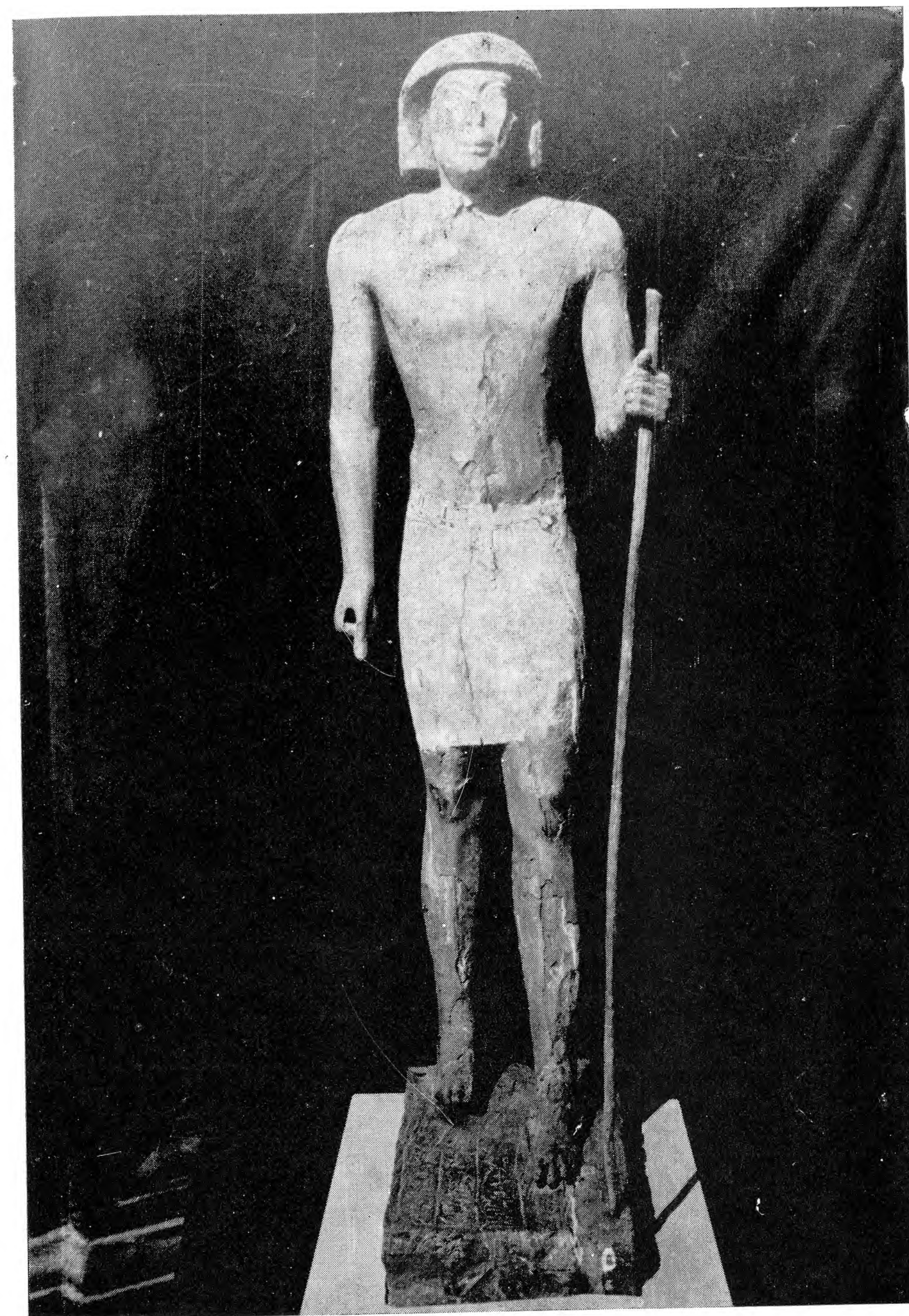
(1) It was an unusual serdab formed by a rubble wall erected at the south wall corner of the shaft. Selim Hassan, ASAE, XXXVIII, p. 506, Exc. at Giza vol. V. p. 46 (Cairo 1944). The tomb itself is situated south-east of the colonnaded hall of the step pyramid.

(2) ASAE, XXXVIII, p. 506 ; Exc. at Giza V. pl. VIII. Also Dr. Ali el Khouly's note according to Saqqara's register.

(3) Black, blue and red.



Reᶜ-ḥw.f in situ when discovered in his tomb at Saqqarah



Reᶜ-ḫw.f after restoration J.E. 93164.

PRELIMINARY REPORT ABOUT FIELDWORK AT THE TOMBS OF NYHETEP-PTAH (GIZA) AND ʿANKHMʿAHOR (SAQQARA).

BY

ALEXANDER BADAWY

The second season of fieldwork carried out by the Univeresity of California from October 1974 to December 1974 in Egyptian tomb chapels from the Old Kingdom investigated the two chapels of Nyhetep-Ptah at Giza ʿAnkhmʿahor at Saqqara.

The poorly preserved tomb chapel of Nyhetep-Ptah is located to the northwest of the great pyramid of Khufu at Giza. Its superstructure oriented N.-S. contains a small room at the southern corner. It was partly published by R. Lepsius in 1849 L.D. I, 22) who gave it the number 25. It has suffered some depredations since. It is of the corridor chapel type, built of regular courses of nummulitic limestone, with slightly battered faces. The doorway opens in a recess and its lower socket is a large block carved with a ledge around a circular conical hollow. As one looks from the doorway to the pyramid one sees the south door jamb where Nyhetep - Ptah is represented striding, holding a kerchief and a long staff. Of the inscription only the title "Venerated before the Great God" is legible. The small chapel contains two pillars fully inscribed in raised relief, a false-door in its west wall, and some fragmentary scenes of offering bearers, and on the north wall the slaughter of an ox.

Each face of the north pillar shows at the bottom a small figure (0.53 m.) of Nyhetep-Ptah striding, faced by a smaller figure of his son Kaemʿankh holding a censer, or the eldest son Kaemtenent censing, or accompanied by his wife Nebty as tall as himself, or standing alone as a large-sized figure.

The scenes in the south pillar are similar : he is presented with a crane by Irien- Reʿ (E.) or folded linen (N.)

He always wears a striated long wig, short kilt, broad collar. and he holds the long staff and the scepter. Above each scene are four columns of hieroglyphs giving the titles of Nyhetep-Ptah, among others : "Director of the Palace, judge of Pharaoh, privy to the secret of the king in all his places". Another interesting office was that of "Overseer of the weapons".

The false-door of the sixth Dynasty type has double facets for each door jamb. Each facet represents Nyhetep-Ptah striding in an attitude similar to the one he assumes on the pillars. The face and neck are painted red, and the eye, in white and black. The three columns of inscription give titles and excerpts from funerary formulae. On the floor in front of the false-door is an offering slab, and farther north of it a table on two stands was later added, abutting against the west wall.

South of the false- door is a fragmentary scene representing Nyhetep- Ptah in the shade of a portable canopy or umbrella, made of two crossing bars covered with a cloth hanging at the top of a slant pole. Nyhetep-Ptah probably inspected his property on a a hot day, for he wears no wig. Behind him is a small-sized retainer carrying a whisk and a throw-stick.

On the wall north of the false-door Nyhetep-Ptah appears again, wearing a panther's hide. The heroic-sized figure encompasses two registers. and stands on a third one. All are peopled with offering bearers bringing varied items, such as (in a row on the lowest register) linen, foreleg of an ox, two birds, a gazelle carried in both arms, and two birds.

On the north wall are a lower register and part of an upper one. In the latter Nyhetep-Ptah seated accompanied by his wife behind his chair, is presented with two vases by his son Kaemthenent. The lively episode below represents the preliminary stage in the process of overturning the ox, and to the left, the slaughter proper.

Though the style of the wall scenes is formal there is a lively composition in the the butchers' scene. Despite the coarse grain of the nummulitic stone the sculptors

attempted to give every one of the offering bearers personalized features of his own, succeeding in characterizing the boorish, unkempt traits. This contrasts with the portrayal of Nyhetep-Ptah on the pillars, which, though formal, succeed in representing the rather refined features of the master, enhanced by conventional painting

The tomb of ʿAnkhmʿahor is located in the group north of the pyramid of king Teti I. It is one of the earliest, for ʿAnkhmʿahor was a high official who bore, among other titles, that of "Prophet of the pyramid Djed-Iswt" (=steadfast of places) of that king, but not of the pyramid of his successor. His neighbour Khentika served as prophet under both Teti and Pepi I. There is much chance that the name was pronounced ʿAnkh-iemʿa-Heri "My life is in the hand of Heri". Heri, lit . the "Upper One", was one of the universal gods preceding Horus. It is significant in this instance that ʿAnkhmʿahor never wrote his name with the hawk sign. He was called Sesi, his "beautiful name" always accompanying his original name, or even superseding it. Though both names bear no relation to each other that of Sesi is clearly of the consonance of other names fashionable during the Sixth Dynasty such as Teti, Pepi, Isesi, and Ikhekhi.

The chapel lies contiguously to two others in a row along a street excavated by V. Loret and published in photographs only by J. Capart in 1907[1]. Its shaft and burial chamber were cleared and more adequately studied by C. Firth and B. Gunn in 1926[2].

Though not as huge and well-preserved (pl. I) as the tombs of Mereruka and Kagemni (Figure 1) in the vicinity that of ʿAnkhmʿahor is as significant on account of its unique scenes of circumcision and surgery and the artistic merit of its style. In the entrance façade oriented east the central doorway opens on to a front shallow room connected to a large north hall containing five pillars, and to a second room similar to the front one. As in a house the doorways are offset for privacy. Actually the chapel imitates a house for the third room of squarish proportions obviously duplicates the living-room, provided

with a magazine (Rm V) and connected to the residence proper (Rm IV). The latter is the vestibule to the bedrooms, here the burial chamber, accessible to the soul through the false-door. There is much probability that the pillars in the north room VI imitated those of a typical pillared portico oriented north in a house, for the wall north of the pillars and the pillars themselves are carved in sunken relief adapted to sun light, in contrast to all the other walls carved in raised relief used in shaded areas.

We get at once acquainted with ʿAnkhm ʿahor, as did the passers-by in his time, for he introduces himself with an enumeration of his titles and he addresses us in an inscription on the south area of the façade : 1 "(Overseer of) all the works of the king in the entire land, Royal Chamberlain of the Great House, Overseer of the Great Mansion, Royal Carpenter, Scribe, ʿAnkhmʿahor, of beautiful name Sesi. (2) he says : (3) If you do anything against this tomb (of the) necropolis(4) I will do the same against you (for) I am an excellent lector-priest... I know every secret of . . . (5) As to all people who will enter into this tomb in their state of impurity, having eaten abomination (6) which a perfect spirit abominates, who shall not be pure for (me) as they should be pure for an excellent spirit who usually did what his lord usually praised, (7) I will snatch him as a bird, I will cast the fear (of myself) in him, in order that the spirits who are upon earth may see, and may fear the excellent spirit."

In the accompanying picture in sunken relief ʿAnkhmʿahor is seated, wearing a starched puffing skirt whose front stands stiffly above his lap. He raises his right hand in a gesture of address and holds his long staff in his left hand. The wavy hair is minutely represented in parallel bands of herringbone pattern. The unusually fine features ally well with the broad collar and bracelets, in this otherwise formal portrait.

More formal is ʿAnkhm ʿahor's portrayal on the north area for he wears a long wig, holds the scepter, while addressing the lector-priest "who will come to this tomb to do an excellent thing according to that sacred writing of the craft of the lector-priest." This text ends with a strong

assertion : "I never said anything evil to the king" . . so that "my name should be loved by God and by all people." This fragmentary text belongs to a type of self-eulogy common to several tomb-owners of the Sixth Dynasty, such as Khentika, Neferseshem-Reʿ, Neferseshem-Ptah.

These formal pictures of ʿAnkhm ʿahor, once threatening, another time indulging in self-eulogy, are however not true to life, for he appears on the two thicknesses of the entranc doorway as a portent man with pendulous breasts and creases of fat of his torso, without wig or beard wearing his jewelry and a long puffing skirt. There is no need to interpret the portrait as that of an old man, since such variation occurs also in other tombs on both thicknesses of the doorway (Khentika, Neferseshem-Ptah), or on one thickness only (Nyswt-Ptah at Giza), or on adjacent faces of pillars (Neferseshemreʿ). The dual portraits are an idealized formal and a naturalistic representations of the deceased.

The composition of the wall scenes in the chapel runs, as elsewhere, in registers in low relief above a dado ca. 1 meter tall, painted with a black zone imitating basalt lining, topped with a yellow band imitating wood and a red band for granite, all delimited by horizontal black lines. Wall scenes in the first room, which is closest to the valley, represent topics from daily life derived from the agricultural cycle such as harvesting and fording, and hunting the hippopotamus in the marshes. Both scenes are often adjacent as at Mereruka, Tji (agricultural and fording), Ptahhetep (fording and hunting). On the two small walls are scenes of barter and personifications of estates.

On the east wall, the longest and best preserved, are two registers depicting the harvest and cattle fording a water stretch. Grain sheaves are stacked into conical silos, grain is piled up in two conical mows, threshed, winnowed in the air or through sieves. Seemingly lacking space at the right end of his composition the artist cut the silos in half along the corner of the wall. To relieve from monotony he used topical detail such as a donkey picking up grain (Kahif, Tji, Ptahhetep, Mereruka), or the

unruly donkey being punished on the threshing floor. In other tombs the animal turns its head back (Kahif), but here, all teeth bared in a vicious grin it throws up its leg to hit the farmer. The reaction comes quick with a shower of blows and the threat : "I will persuade thee to turn round there!" The peasant at the rear is alerted : "Descend with them, comrade!" Farther a portent aged peasant throws up the grain, and another kneels down still holding his fork, to sweep the fallen grain. The grain winnowed by the women is heaped up by a peasant who urges : "Hurry up with it, my sister!" To which she answers submissively : "I am doing to thy satisfaction! That the artist followed a model is corroborated by the fact that the sequence of action runs in reverse order, from the interior to the doorway (= south to north), instead of being adapted to the actual wall.

In the register below a herd of oxen and cows swim across a canal lured to the fore by a calf bound to the front skiff, Two herdsmen kneeling in the skiff turn back toward the herd, their right arm stretched horizontally with stiff forefinger while they utter the powerful spell of magic that paralyses the crocodile from aggression : "O this shepherd! Live thy face against that aquatic that is in water! So that these ones do not go to that aquatic, he being as a blind-of-head! Live thy face against him very much!" Another crocodile hides beneath the boat at the rear. The whole performance is called: "Repelling the crocodile." This fording of cattle, either swimming as here (cf. Kaemnofert, Kagemni, Mereruka) or wading in the still water behind an aged shepherd carrying a calf (Tji, Akhethetep) is a typical theme. Nowhere, however, does the herd number 32 heads, but usually vary between 8 (Mereruka) and 13 (Tji). This multitudiness allied to iteration form the two basic characteristics of our artist. There is also more expression of feeling in the gestures of the calf and its mother licking, while elsewhere the tongues do not meet (Kagemni, Tji), or the calf simply turns back its head, or even does not look back (Mereruka).

On the opposite west wall only the lower part of a scene of hunting the hippopotamus appears, badly

weathered at its north end where several ropes can still be traced to the harpoons lodged in a hippopotamus, as at Kagemni. Behind must have spread a background of vertical stylized stems of papyrus, as at Tji, and Mereruka. At the south end another focus of drama depicts a female hippopotamus giving birth while a huge crocodile stands just behind, ready to snatch off the newly born. This topical detail is treated with more realism at Idwt (Saqqara, late Sixth Dynasty) where both hippopotamus and crocodile open wide their mouths. There, however, the background is absolutely void, while that at Mereruka is moderately peopled, and more densely at Tji and Kagemni. ʿAnkhmʿahor's artist seems to have abided by a real *Horror vacui* trying to fill in with fish and plant so that hardly any space is left for the water. This may be another aspect of the multitudinous style, but it does not prevent from accuracy for all the fish and water plants species can be identified.

On the north wall close to the entrance are market scenes in two registers. Loaves and liquids are handled under the supervision of scribe seated at the left end. This scribe is probably the same personage shown twice, characterized by a protruding lower lip. The two men handling loaves to the right exchange a brief dialogue; "Cause to come another excellent loaf!" "It is full, very much!" The group to the left is also busy with loaves but the buyer turns his head round in a contorted attitude to order the scribe: "Write to thee a total making a record of 6 *pesen* loaves!" "I jot down these to my best..." Meanwhile the dealer remarks: "Would then that thou seest really how this *reteh* bread is in good condition!" We should note that both rustic dealers wear only a flap skirt which they turned back on their loins, as did the peasant stacking grain in the harvest scene.

On the south wall a formal procession of female personifications of estates is enlivened by the varied attitudes of the accompanying animals. The names of the estates have disappeared except for the first one composed with the name king Wnas from the Fifth Dynasty, and the fifth and seventh, which are those of a type of bread and of the

zyziphus fruit-perhaps fictitious, aiming only at accruing the variety of items provided. There could have been three more registers above this one with a total of 28 personifications, which compares reasonably well with those in other tombs.

On the doorway between Room I and Room II is one register on either thickness representing the barter of fresh product of fruits and salad, or dried fish against manufactured items such as spindle whorls or a headrest. An alluring dialogue is exchanged; "Look ! " "Take something good and sweet for thy heart ! " drawing enthused comments: "O artisan ! thou art (as) an able man ! "What is remarkable, in addition to the choice of similar topics on the opposed thicknesses is the radical contrast of style. Figures on the south door thickness show a combinaton of side view and half the torso, with an indicaton of the muscles and navel. Those on the north face are in rigid composite projecton with a geometrized outline and a complete lack of anatomical detail. A similar instance of two hands shows on the doorways between rooms II and III, and further between III and IV.

Let us now enter Room II. At the north end of either long wall east and west ʿAnkhmʿahor stands watching the activities of his people. On the best preserved west wall is fowling in the marshes. The crafts on the south wall (pl. II) can be watched by both figures on the east and west walls. Here are goldsmiths, sculptors and vase drillers, leather workers, and jewelers at work. The various stages of metalwork are depicted, beginning with weighing the ingots by the "Overseer of ingots" squatting on the floor of a hall with lotus columns. In his right hand he lifts up the scales while steadying his arm with his left hand, and dictates to the scribe recording the amounts. The two scales are suspended from two small forearms directed towards the central stand of the balance ... a detail found at Mereruka, but reversed. To smelt the ingots in a conical furnace the fire is activated by four men blowing in their pipes while a fifth pokes with a short rod. The group is really excited: "Look at his face! It is a new pot." "Put

very much in his sandal, comrade!" "I do to thy pleasure". The ingots after being refined are hammered while still hot into thin sheets : "To hammer the gold for the funerary equipment." In the vicinity sculptors work on five statues representing ʿAnkhmʿahor standing twice in the company of a son. One son identified by the inscription as Ishefi, who always apppears with his father. The other affigy was completely erased a phenomenon which recurrs in four other instances and denotes some family feud. An "Overseer of sculptors" his adze flung over his shoulder, stands on the pedestal of the statue and strikes his chisel with gentle strokes of his right hand. Next to him is the" Scribe of the Waʿ bet of the South"by name Mesi painting the lower edge of the wig of a statue made of *shepenenet*, an unknown material, as the third one made of *kesebet*. The type of statue portraying father accompanied by his son is known from the renowned copper statues of Pepi I and his son Merenreʿ (C.M.). Another overseer of sculptors polishes a statue with a pebble while his assistant works with hammer and chisel on its pedestal. In a room by themselves (right bottom) four artisans squatting on the floor drill the interior of two stone vases with a cranked brace and flint borer, or polish two others. Leather is prepared and cut into sandals and bags by three artisans. The one standing rolls the leather to-and-fro across the top of a vertical stand, and he says, obviously satisfied at the results : "It is quite supple !" Jewelery of embossed gold and semi-precious stones are stringed into broad collars and their counterpoises, bracelets and pectorals by six alert dwarfs sitting in pairs at low tables. The finished pieces are then inventoried by keepers and recorded by a scribe at work in a columned hall.

Fowling with the clap-net is basically a sport, but it is also essential for provisioning the kitchens with meat and the fowl yards with living fowl to breed. Here only two phases of the hunt are depicted in two superimposed registers : the hexagonal net still open above its water basin fills with birds allured by the decoy of a crane or heron, always provided at one corner of the scene. Behind a screen of rushes the men stand ready to pull on the rope, trying to keep silent at the admonition

of their leader : "There are lots of birds for thy arm, this fowler, if you keep quiet!" Very soon, however, the whole gang pulling of the cord sprawl flat on their hips to get a good grip with their feet on the slippery mud. Some of the men have already sprung to the net to disentangle the birds caught between the lids and framework, intertwining their wings to prevent them from escaping. In other tombs there is, in addition, an initial stage showing the arrangement of ropes and pegs to build up the clap net (Tji), or the fowling yard consisting of a central basin surrounded by a columned portico (Kagemni). There is no way to tell whether one or both scenes existed here in the upper register (s). We meet some of the queerest characters among these fowlers of the marshes, usually unkempt with balding heads and bodily defects observed at leisure on their naked figures. The anatomical detail doubles with pathological observation as for the hernia of an elder shepherd carrying a calf at Tji, but nowhere does it record so accurately a hernia of the navel, or a dropsy of the scrotum as here.

Facing ʿAnkhm ʿahor is a small group of retainers, among others the Court physician ʿAnkh and the Inspector of the funerary priests, Hepi, a fat bare-headed personage who hastens carrying a bunch of birds in the left hand and three trussed geese in the right one. To show adequately the remarkable fatness the artist chose to represent the figure in accurate side view. This personage appears again with similar features on the west thickness of door III-IV. Immediately preceding ʿAnkhm ʿahor is his son Ishefi, and following him was another son whose hammered-out figure can be identified with that of the boy in the group statue. Above is a dwarf carrying a small basket of fruit and pulling on the leash of an ape nesting on his shoulder. The spirited animal holds delicately a fruit to his mouth while he steadies himself with his left arm on the dwarf's head.

The north wall preserves two registers of offering bearers, the first of a long sequence that covers the walls of the two next rooms III and IV. While all the other offering bearers proceed to the interior towards figures of

ʿAnkhmʿahor standing to meet them, these here are directed the opposite way and follow the figure of ʿAnkhmʿahor standing on the east wall, now nearly destroyed. The men walk in a formal procession carrying large vases of perfume and stacks of folded linen obviously part of the equipment, accompanied by a dog and an ape whose name Meridies "Love, she gives" betrays its frolicsome character. We thus meet two, "Director of the seh-pavilion" (first personage) followed by Tetiʿankh who bears the same title. In the lower register vases and baskets, jugs and wicker containers, fowl and flowers are brought as food provisions, accompanied by a second dog, a calf and a gazelle. Characteristic for the Sixth Dynasty is the crowding of items carried, not only in both hands, but also hanging from the elbow while animals are lead on the leash. All the men wear a short kilt and a wig as a ceremonial dress, for they are not ordinary servants, but the servants of the ka-spirit or funerary priests. At the end of the procession come running at full speed three messengers. They wear sandals-the only persons allowed such a luxury other than ʿAnkhm ʿahor himself. Their feet scarcely touch ground. On the pole slung across their shoulder hang huge baskets of victuals, and they hold bunches of fowl, flowers or a baton. Their hurried pace obvious from their stance is voiced loudly by the one to the fore :"Make way to me!" In other chapels such messengers carry hanging from their poles small caskets with newly born birds and quadrupeds. Here they probably bring perishable victuals.

The doorway between rooms II and III (pl. III) shows on its two thicknesses an identical composition: two antelopes marched by three men (top register, preserved on south thickness), overturning the sacrificial ox, and two animals marched by three or four men. Horizontal inscriptions between the registrs give the general title : "Marching oxen by the funerary priests of the estate, "or" marching desert animals brought to him by the funerary priests. In addition are smaller inscriptions in the ground of the picture defining the species of the animals, or recording a dialogue. The man who pulls on the muzzle and horns of a massive oryx is told "Snatch very much to thee" !, or the one pulling the

gazelle behind says: "Hold it fast! " The poor animal is in the meantime suckling its fawn. On the southern thickness of the doorway the man pulling an oryx by its forepaw and horns is told:"Make this oryx proceed before the lector priest comes!"casting a vivid light on the hectic preparations previous to the appearance of that important personage. The overpowering of the ox supervised by the chief herdsman is the topic of the mid register, treated on both thicknesses in nearly the same composition, but different in style, betraying two different hands as if it were a competition. Two men hang on, or jump at the horns, two others at the tail, while still two others kneel down, trying to snatch a leg of the ox off the ground. The figures in instantaneous motion and acrobatic attitudes could hardly maintain their equilibrium. The pyramidal composition is built around the massive ox. Though both scenes are vividly animated there is even more mannerism and less void ground on the south face. The intertwined limbs reach the highest intricacy, and the hectic atmosphere does not leave any opportunity for a dialogue.

Room III marks the center of the chapel, as did the square columned hall in a typical house. In it ʿAnkhmʿahor meets the offering bearers, for which purpose he appears at one end of every wall. The heroic-sized figure always encompasses the four registers of bearers proceeding toward him. A horizontal line of inscription surmounts as a title every register. As many as 6 offering bearers (north) proceed with their profuse victuals, accompanied by their animals. ʿAnkhm ʿahor is preceded by one (north) or two personages (west) and followed by another, except on the east where he stands alone. Though the processions may prove monotonous there is always some attempt to relieve from this monotony by a variation in the attitudes of the animals or even the figures. Moreover ʿAnkhm ʿahor and his small court also show variation. On the west wall he wears a panther's skin, the head emblem applied on to the belly and the fastening strap hanging with a knot from his left shoulder. The panther's skin was worn by the *sem* priest, ranking highest in the hierarchy of the clergy. In front stands his "August brother, inspector of the house,

inspector of the land-tenants of Pharaoh, Tjemerw." On the east wall opposite he wears a short kilt, long wig, and ceremonial beard. Around his neck is a broad collar, and straps cross on his chest over which hangs a necklace adorned with a Bat emblem. From his belt hangs a trapezoid apron decorated with five strings of beads and tassels. The emblem of the goddess Bat denoted a dignity conferred by Pharaoh on his close attendants for certain ceremonies such as that of the royal jubilee, and was appropriated as a result of the democratization process by an increasing number of high officials. ʿAnkhmʿahor's emblem differs from all others because it is not applied on to the crossing straps, but hangs independently from a necklace.

On the south wall (pl. 4) ʿAnkhmʿahor is again represented with the panther's costume, slightly differing from the one he wears on the east wall because the tail crosses part of the hide---a form earlier than the one with the tail hanging from the lower edge, and rather rare in the Sixth Dynasty. In the vertical area between the tall staff and the corner of the room there appear several collars and counterpoises, and bracelets displayed on low tables seemingly in the care of Tjemerw (pl. 5). Below is an important inscription: "Reading out to him the account of his funerary furniture given to him as a royal boon; the overseer of the works of the king, Sesi." This deed was supposed to be read by the personage whose figure was thoroughly erased not enough, however, for the feet and the scribe's equipment neatly arrayed show in front of the defaced effigy---probably again the same son, victim of the family feud.

On the two thicknesses of the doorway opening just west of this scene on to Room V, intended as a magazine, is represented the funerary furniture being transported into it by several men. Huge vessels containing the seven perfumed oils and unguents, bags of incense, a basin and its spouted ablution vessel, necklaces with a pendant flanked by two uraei, collars and their counterpoises, straps, and at the bottom, folded linen held vertically in both hands by four men. Two of these offering bearers assume an unusual attitude, with one shoulder in side view to allow

them to be accommodated in the narrow space left by two other figures in the normal composite projection. On the opposed face large cashets are carried by two men, and very tall vessels of the *hes*-type are held up in pairs by each man. A similar procession appears on the east wall of the magazine itself (room V)

The offerings represented on the thicknesses of doorway III-IV consist of victuals and live stock specified as a royal boon. Here again two hands as to style can be discerned, more refined in the design on the east face, though less detailed than on the west one. On the latter Hepi appears again, burdened as before with bunches of fowl and leading a fat calf. Again the portent man is represented in side view.

The innermost room, by far the largest (room IV = 2.72 ×5.94 m.) is the counterpart of the lobby to the private apartments in the typical house. Through the false-door that formed the west end of that room, now disappeared, ʿAnkhm ʿahor could emerge from his underground burial chamber to partake of the funerary ritual performed and have his repast from the victuals presented. For this purpose there was in the chapel of Neferseshem-Ptah, next to this one, an offering slab at the foot of the falsedoor and a table was built against the north wall to the right. In addition the two long walls partly preserved at ʿAnkhm-ʿahor are carved with two registers of long processions of offering bearers walking toward the false-door. At that end of each wall must have been a figure of ʿAnkhm ʿahor, seated (cf. Nefersesbem-Ptah, Khentika) ready to receive the gifts "at Wag feast, at every feast, in the West, every day, in the necropolis, by the funerary priests of the estate of the ka-spirit of the royal chamberlain, ʿAnkhm-ʿahor, august"

The east wall is entirely carved with scenes depicting the slaughter of the sacrificial oxen. Only the lowest register is finished in a bold carving, while in the two registers above only the hieroglyphs and the heads of the personages are finished leaving the figures simply delineated

probably indicating that the work of the sculptors was hastened at the sudden death of ʿAnkhm ʿahor. The compositions are among the liveliest of the tomb with plenty of violent movements of the butchers cutting the haunches and forelegs, the ribs, driving out the heart and viscera which their assistants carry to the table. A unique episode shows the thoracic cage drawn out and the intestines unraveled by 2 butchers (mid bottom). The same hectic animation under the threat of the arrival of the lector priest is expressed by the captions : "Stand up! hurry, comrade ! Thou wilt let this row of ribs on the table before the lector priest come to do things!" (lower left). There is an extraordinarily profuse exchange of dialogues, often marked with irony. Butchers and assistants are busy in groups of four around an ox bound on the floor. There could be five such groups per register. In the middle of the lowest register a butcher is cutting the haunch held fast by his assistant : "Make that I finish with its shoulder, for the ka-spirit of Sesi!", and he orders the man behind him who holds the horns of the animal : "Turn round the ox head Hurry!". Sometimes some ironic comment betrays some character : "Who art thou? The real guy, it is me ".

But let us leave these folk to their chores and go back to the entrance. From there the funeral procession entered the pillared portico, crossed the court to ascend the stairway rising to the terrace, where the last rites were performed, before lowering the coffin down the shaft. On both thicknesses of the doorway I-VI (pl. VI) are small scenes of surgical interventions. The most renowned is the circumcision on the east face. A boy at puberty is held fast by an attendant while the operator rubs his member perhaps with a "stone of Memphis"., known to Diodorus and Pliny. This is identified as a carbonate of lime that produces analgesic effect through carbonic gas emitted when wetted with an acid. The operator orders. "Hold him Do not let him swoon !" In the second phase the boy, already less apprehensive steadies himself by laying his hand on his hip and another on the operator's head, even encouraging him : "Obliterate really thoroughly!" To which the operator answers: "I will make(it) agreeable".

Only two other fragmentary scenes of circumcision are known on later monuments.

Above this scene is a fragmentary picture of massaging the leg and rubbing the back with some swab or unguent a treatment known at Ptahhetep and Khentika. On the opposite door thickness (west) two registers depict minor surgery on hands and feet, sometimes interpreted as manicure and pedicure. The surgical character is proved by the caption inscribed above the operator to the right, treating a toe : "Do not cause pain to these!" There are also several gestures made by the patients to steady their arms against nervous twitches.

Just around the left edge of the doorway, on the south wall of the pillared portico, is a dramatic representation of the funeral. This topic occurred since the Fourth Dynasty (Debehen at Giza), increasing during the Fifth (Akhethetepher at Leiden, Akhethetep in the Louvre) and especially in the Sixth Dynasty (Qar and Idw at Giza, Ptahehetep, Mereruka, Idwt at Saqqara, painting of Snefruinshatef at Dahshur). The formal part of the scene depicts the two phases of the procession of officers carrying folded linen, preceding the empty bier to the estate (upper register) and again with the mummy laid in its bier "going forth from the estate toward the goodly west" as recorded by the legend. In the latter phase we recognize, walking behind the bier carried by six carriers with the additional help of five or six others supporting it, the female mourner (*djeret*), the "overseer of the seal-bearers of God" holding a long staff, a scepter and wearing a slant scarf across his left shoulder, two "embalmers of Anubis" and the "lector priest". The center of the scene is the enclosed yard of the estate shown in plan in the left corner. There stand pathetic figures of two women shouting "O father possessor of charm!". Three other women are squatting, gesturing in despair. Among those who try to follow the bier in two orderly files of men and women some swooning elders are being helped to their feet by two companions, and the three proceed in an embrace. This successful composition was praised by W.S. Smith as an "interplay of movements maintained throughout a large group of mourning women as with the men on the register above". And the same scholar concluded with his remark about "admirable united figures." But more arresting than the physcial aspect is the variation in the expression of grief with beating the head, pulling the hair or the whole figure bent over itself in attrition.

At the east end of the portico is an alcove with two antae upon which ʿAnkhmʿahor is depicted striding out. The south end wall is occupied by a scene of two boys and five girls dancing in front of ʿAnkhmʿahor seated on a lion-feet chair. In contrast with all other scenes in the chapel this one has a void background against which are silhouetted the gracile figures of the girls standing on one leg, flinging up the other one and the two arms in an acrobatic instantaneous stance of a ballet. Here is an able rendering of the balance between the leg, its tensely stretched out foot, the two arms and the mass of the curving back pleasantly echoed in the ball dangling from the long streamer of the hair cap. Restoration of the ballet figures moving to the rhythm of the clapping of hands and chants of the two women facing the group can only be wild surmise.

At the opposite end of the alcove the badly eroded scene still shows the process of fattening cattle a topic known more fully elsewhere. This scene, as well as many more on the east wall now destroyed, were watched by ʿAnkhmʿahor standing at the south end, accompanied by 'his real eldest son, sole Companion, Ishefi." Behind him stood another effigy that was carefully erased, leaving only the shadow of both feet and the left arm - one of the six instances of such an attrition.

There is no way to tell what the very extensive walls, ca. twelve meters long, represented, except for a representation of two freight - boats moored at the dockyard, known to have existed from the remains of carving on a loose block. The inscription records that the boats transported cattle from the villages of ʿAnkhmʿahor in Upper Egypt . All five pillars, of which one is intact, bear the same inscription with slight variants on the four sides. The inscription in one column surmounts a small

figure of ʿAnkhmʿahor in sunken relief. The inscription gives titles, mostly honorific of the deceased "venerated before the Great God," ' before the lord of the west' or "before Osiris." Preceding these are the highest titles in the government such as vizier, chief justice, Overseer of the two treasuries or honorific as Count, The One in Nekhen, Chief of Nekheb, all of which sound as honorific. They never appear in the inscriptions of the chapel itself, where the main title, probably the closest to the heart of its bearer, is "Overseer of all the works of the king in the entire land".

This somewhat lengthy account about the chapel of ʿAnkhmʿahor arouses several questions pertaining to his person and family, to his sculptor and his relations with them. To the architect ʿAnkhm ʿahor the services of the best among the court sculptors evidently easy to secure. If we accept the conclusion that all the highest titles in the government were honorific, as they seem to have been for other personages of that time such as Khentika, we are led to picture ʿAnkhmʿahor as an able master-builder whose interest in his art did not exclude versatility in other scientific pursuits.

One oddity about ʿAnkhmʿahor is the total absence of any mention of his wife, though women folk do appear at his funeral calling him Father, as well as other elderly women. This absence of the wife occurs also at Khentika. The personality of ʿAnkhmʿahor is obscure for there is no biographical inscription. From the titles only an official picture can be derived. The family feud which we suspect from the five instances of erasing the effigy of a son should be ascribed to the eldest son Ishefi rather than to dissesions relating to his wife, though this assumption can by no means be excluded. The eldest son Isheifi could have wished to obliterate all traces of his younger brother after the death of their father, for some dark reason perhaps relating to heritage. The theory invented by Maspero and accepted by Capart that such an obliteration in the chapels of that time was to remove any trace of a son who was given an independent tomb cannot hold

since it was not planned from the start to allow more than one room for one son, as here for Ishefi only.

As suggested before there is abundant evidence from the quality of the wall scenes that top artists and sculptors were responsible for the work. Though submitting to the fashion for profuse equipment in the items carried by the offering bearers the composition denotes in several of the larger scenes a masterful balance between subject matter and background as in the dance, sometimes obscured by crowding legends around lively groups as in the slaughter scene, or even a real horror *vacui* of decorative trend such as the hippopotamus hunt. In the long scenes two foci of interest are provided, one at either end, such as the two boats and crocodiles in the fording scene, the hippopotamus being hunted and another giving birth the clap nets and the retainers turning their back to the action.

In general the style is repetitious, often duplicating the same motif or figure in superimposed registers. It is also multitudinous, when a cattle herd numbering no less than 32 heads crosses a ford instead of the usual six or nine ones in other chapels. Such a repetition verges on mannerism, as suggested by W. Wolf.

There is no doubt several hands were responsible for the carving, as can be proved from the examen of some scenes, especially those in the two opposed faces of the same doorway, as market scenes for doorway I- II, pyramid composition in the scene of overturning the ox bordered by the marching of cattle in doorway II- III, or the stylistic differentiation between the same hieroglyphic groups in doorway III-IV. This the signs for the owl or the city are more minutely finished on the, west face, though less refined in shape than on the east one. The sculptor of the east face could eventually achieve splendid work, both as to design and elaborate detail. The same variation occurs even on the same wall, as on the north ore of room III, where baskets hanging from the elbow of their bearers are shown with the strap in the upper register, but without any

strap in the register below. On opposite walls in Room IV the south wall, rather flat and left unfinished, contrasts with the bold well- finished carving of the north wall, sometimes achieving real jewels such as the pair of young quadrupeds carried in their wickerwork basket, (pl. VII) or the young birds in their sack. Details of collars with their counterpoises, bracelets, and unusual pendants flanked by two uraei are quite elaborately recorded among the funerary equipment displayed and carried to the magazine (doorway III- V S, III S). This digression on the excellence of detail can end with a glance at the subtle modelling of an ox' head (IV, E), and the anatomical study of the effort in the herdsman pulling on a reluctant oryx (II- III, N). When examining the two portrayals of fat Hepi one is tempted to recognize two styles, a subtler expression of the character in the figure bringing fowl from the clap net (II, W) than in the other (III- IV, W).

To alleviate of the monotony intrinsic to long processions of scores of figures certain well-known devices are used, such as, for animals, turning back the head, fawn suckling at the udder of its mother, reluctant oryx, triangular composition. For people there appear characters and defects of individuals, unusual foreshortenings, but also humoristic traits enhanced by the accompanying captions as for the peasant punishing the vicious donkey that tries to bite and kick him on the threshing floor, or the ape nesting on the shoulder of a dwarf and eating a fruit picked out of his basket. Drama in the animal world is accompanied by cynical humor as for the small hippopotamus born to land in the mouth of a crocodile.

One last point remains to be investigated. What was the relation of ʿAnkhmʿahor with his sculptors? Was there any aesthetic incentive, apart from the utilitarian concern of the deceased for an adequate life in the netherworld? The hope of the deceased for a careful setting of the lid of his sarcophagus after his burial is expressed in a text common at that time : "Every man who made this for me, he will never regret it. Sculptor or

quarryman, I will reward him". We know about Ptahhetep's liberal treatment of his sculptor Ptah ʿankh, whom he allowed to be represented on the main wall of his chapel sailing a boat and being presented with drinks and victuals. Ptahhetep even calls his sculptor "his benefactor his beloved, venerated before him,"[12]

There is no such written evidence about ʿAnkhmʿahor's relations with his sculptors. We can, however, infer from two observations that he did control their work. Among the animals accompanying the offering bearers in the rearmost room (IV,N) a hyena was altered once into a calf, and another time into an antelope, not thoroughly enough, however, to obliterate completely the heavy head and slant back. This hyena that became a calf proves that the species was not tolerated by ʿAnkhmʿahor, though forming part of the repertoire of domesticated animals represented in mastaba chapels since the Fourth Dynasty. To this control by ʿAnkhmʿahor could be attributed the unique occurence of surgery topics, and the unusual recording of physical defects betraying his personal interest in medicine---an interest attributed also by tradition to Imhotep, the great architect of the Third Dynasty, who was deified as Imuthes, god of medicine.

As a conclusion let us review the artistic merits of the tomb chapel of ʿAnkhmʿahor. The fact that the tomb is one of the earliest, if not the earliest of the whole group of tombs north of Teti's pyramid confers upon it a special importance. Regarding the establishment of a school of artists. We know that the tomb of Nefer-seshem-Ptah adjacent to it to the north was probably the work of the same artist, or school. The chapel of Khentika shows several unusual topics perhaps derived from those at ʿAnkhmʿahor. As to its architectural plan the tomb chapel shows the clearest imitation of a house, even to have a pillared portico fronting its north façade---the only occurrence of such a portico, that was transformed in later chapels into a pillared hall.

In addition to the usual repertoire of wall scenes of that time a few unique topics are invented such as circumcision, surgical treatment of hands and feet, massaging

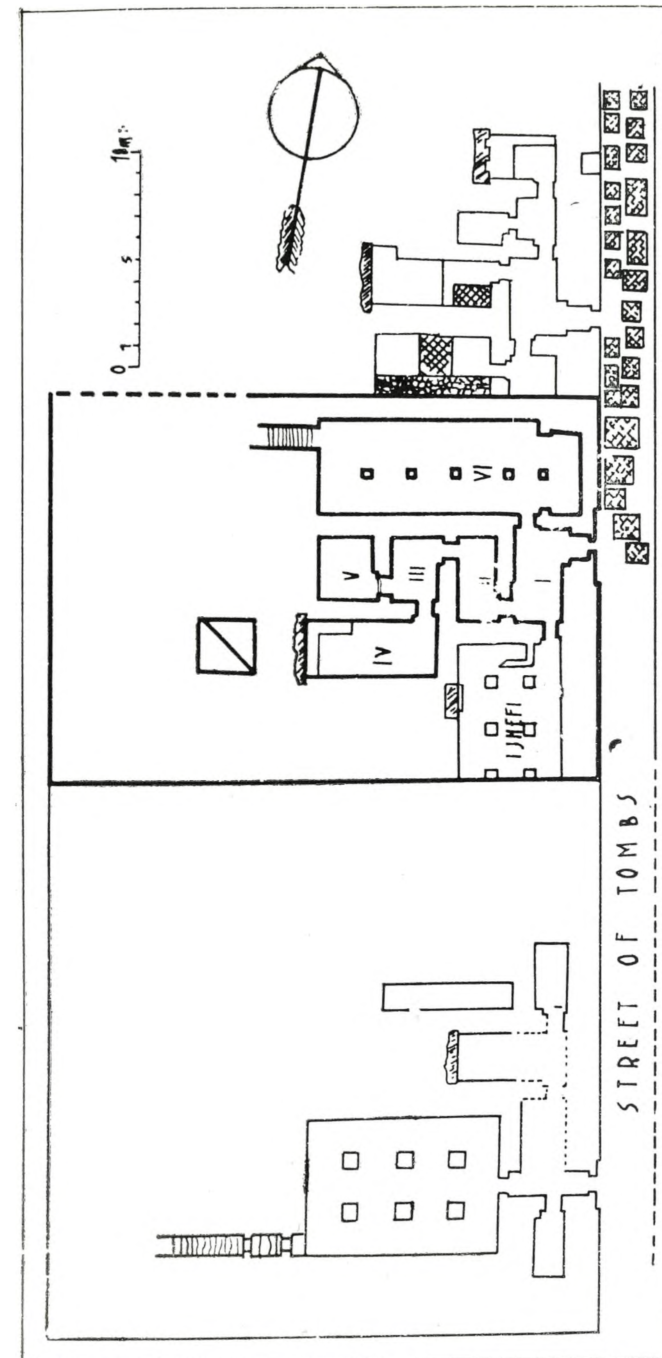
pathological observation of the dropsy of the scrotum, and in the slaughter cycle the episode of withdrawing the ribs and unraveling the intestines of the ox. To a repetitious multitudinous composition representing numerous figures and profuse equipment allies a versatility in style ranging from a void background to real horror vacui treated in a decorative trend. Overlapping is consistently avoided, even to represent the vases that are carried close to the figures at some distance and askew, in contradiction with gravity. Lines run continuous in the same figure, such as for the edge of the wig and the shoulder, but also from the figure to the paraphernalia it carries or animals it leads, where the outline of the legs of man and animals coincide. The naturalistic trend in the observation of anatomy does not exclude mannerism.

As to carving a smooth supple technique forms the general rule, bolder in some instances but never excessive as at Mereruka. Even primary carving by lesser artists and unfinished scenes do not detract of the superb quality that betrays a master of much initiative, whose name, unhappily, remains unknown.

Alexander Badawy

Notes

1. J. Capart, Une rue de tombeaux à Saqqarah (Bruxelles, 1907), pp. 27—62.
2. C. Firth and B. Gunn, Teti Pyramid Cemeteries (Cairo, 1926).



Plan of the Tomb of 'Ankhm'ahor.

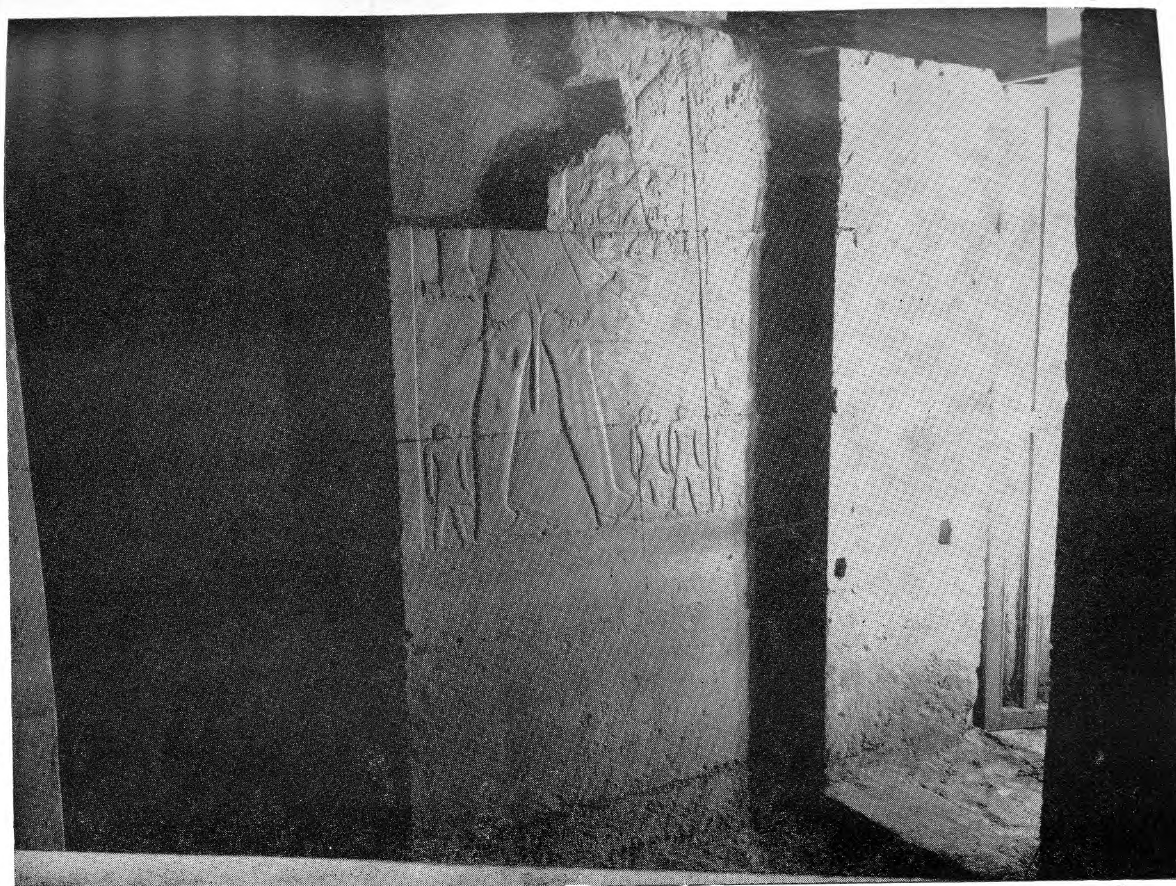


Craftsmen at work on statues, beating gold, drilling vases, preparing leather, and dwarfs making jewelry.

Pl. II

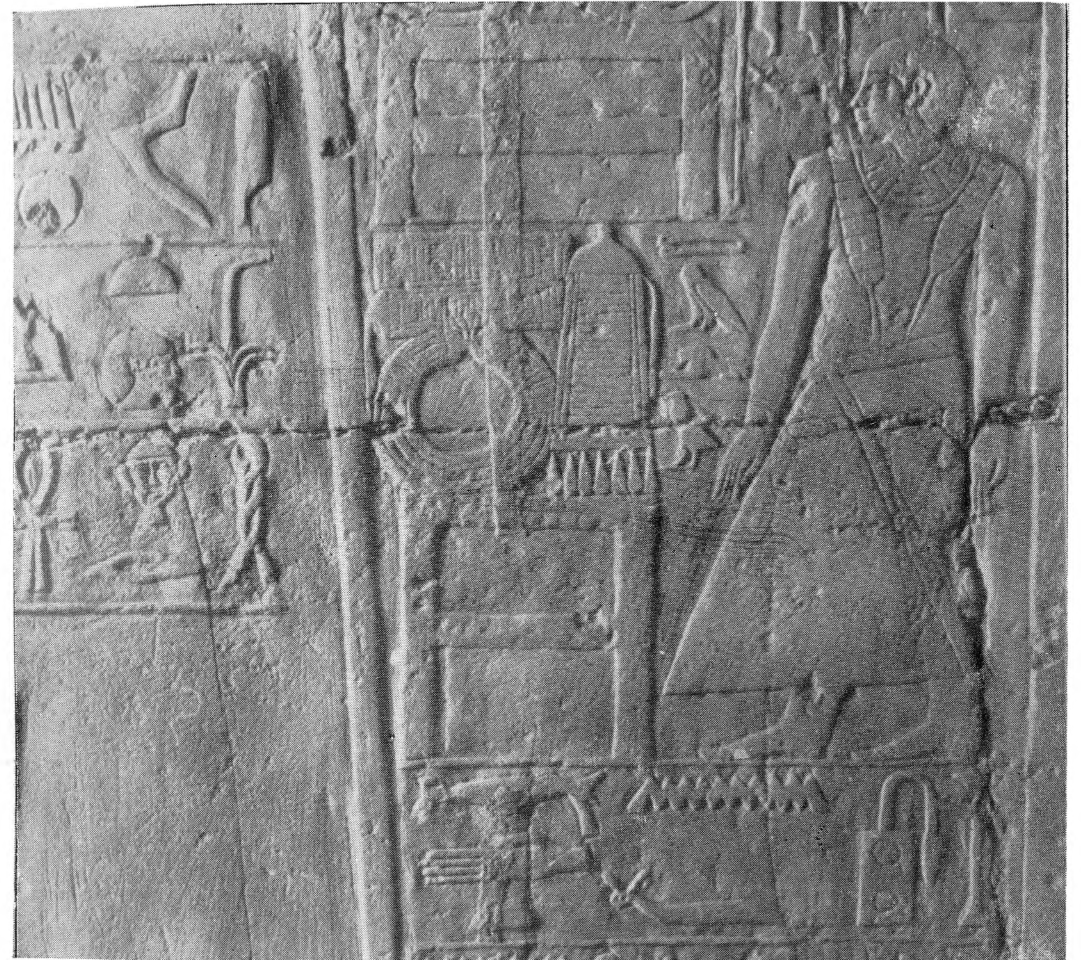


Scenes on thickness of door II-III representing the over powering of the ox, and marching cattle.

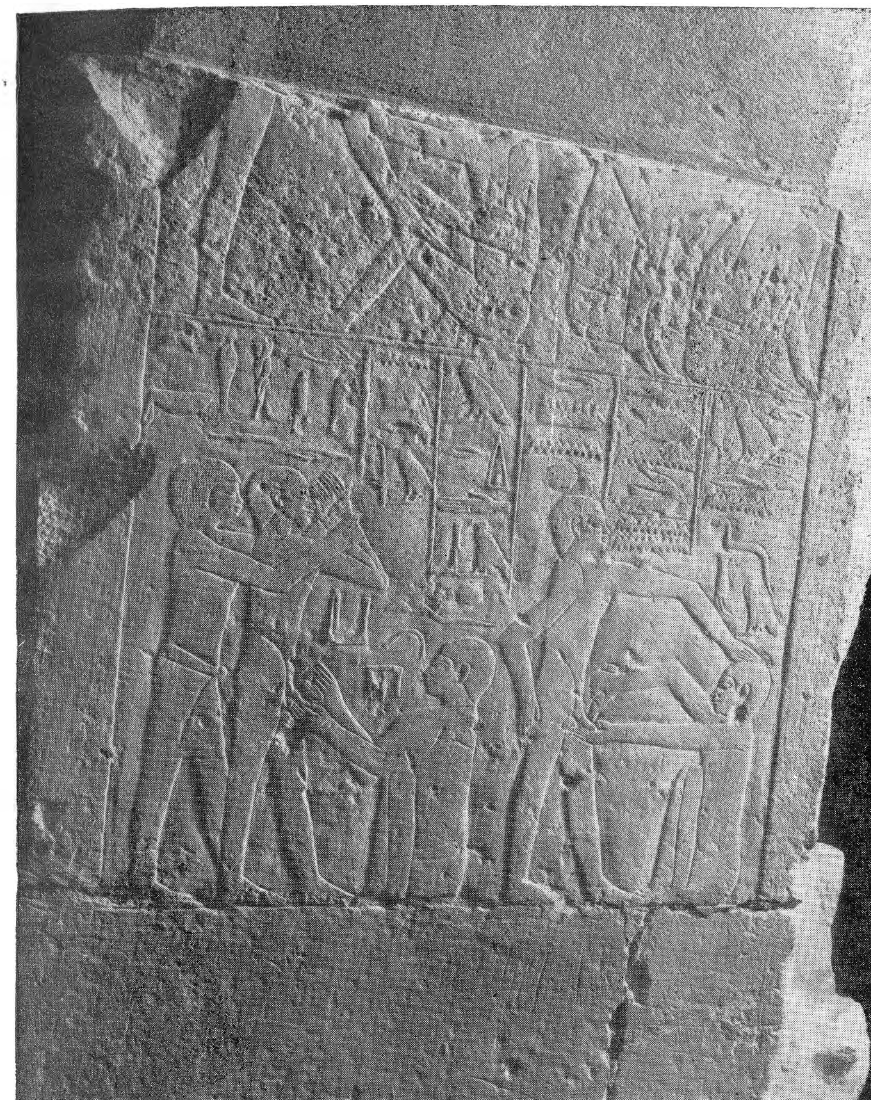


ʿAnkhmʿaḥor supervising the display of this jewelry (South wall, room III). To the right the door to the treasury.

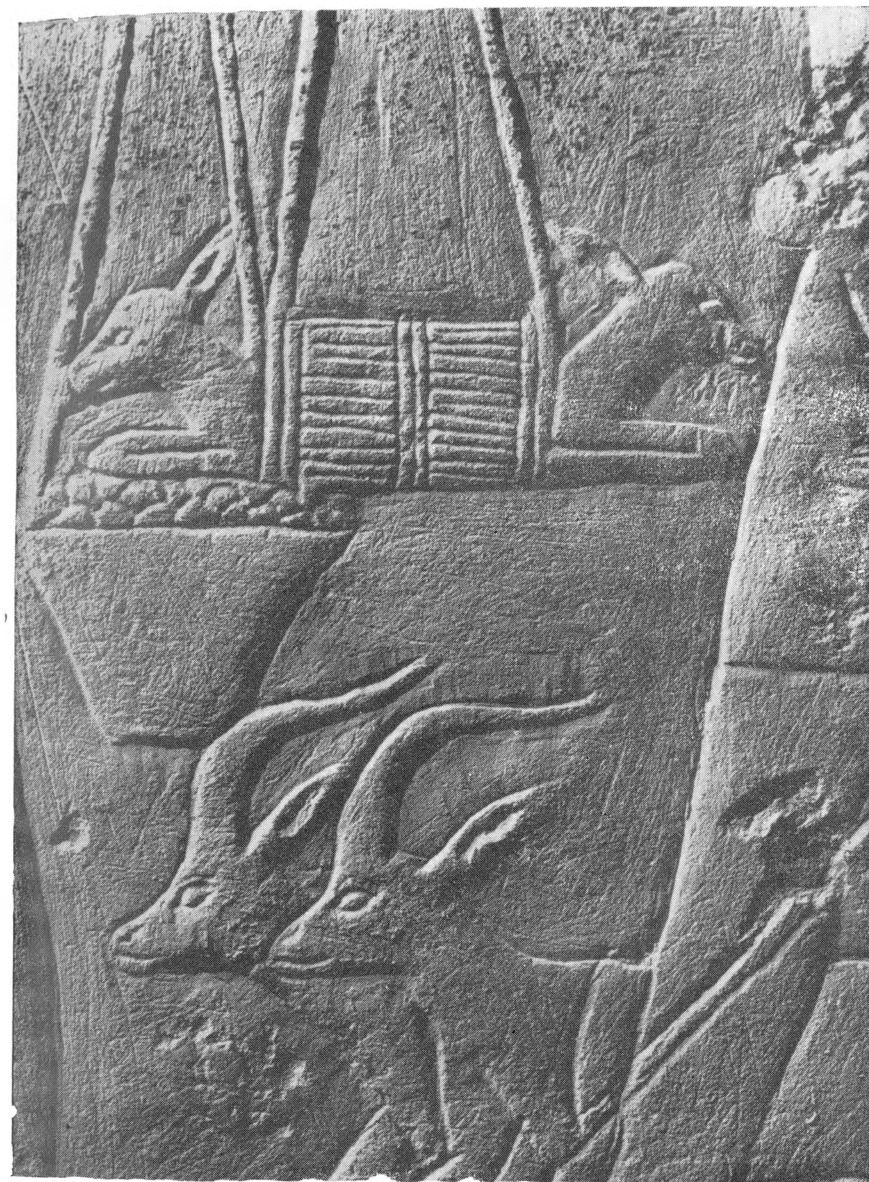
Pl. IV



Tjemerw, brother of ʿAhkh mʿahor in charge of the jewelry.



Two phases of circumcision and above massaging back and leg (east thickness, doorway (I-VI).



Two young fawns carried in a wicker work mat. (northwall, room IV).

PRELIMINARY REPORT ON THE NEW DISCOVERY OF THE TEMPLE OF RAMESSES II AT HELIOPOLIS

(Seasons 1964 - 1967)

BY

MOTAWI BALBOUSH

Close to the north about one kilometer from Mattariyah at Cairo lies the vill.ge of Arab el-Hisn, situated about 30 km. to the north of Cairo and only about one km. from Mattaryieh. In 1964 there was reported the finding of some blocks outside the village, Arab-el-Hisn to the north of it consequently excavations started in the site on 7th April, 1964. The work whose results we show here, went on for three seasons 1964-1967.

The work in the first season began on 7th April for forty three days, during this interval the excavation and soundings were carried out at the east of the Tawfikia canal of (Arab el Hisn). The excavation revealed two jambs of limestone dating back to the New-Kingdom (Figs. 1-3, Pls. 1, 2). They bear inscriptions with names and titles of the kings Ramesses II, Ramesses IX and his son *Nb maat Re* the overseer of Heliopolis. The work in the second season began on the 7th. February 1965 for about twenty two days. The excavation was carried out at the east of the two jambs of the first season. It revealed a small hall built of mud-bricks 2.20 m. in height 7.80 m.L. ; 6.50 m. breadth. At the eastern Hall of this hall the excavation revealed another two jambs of limestone (Figs. 4, 5, Pl. 3).

They bear inscription mentioning only the name and titles of Ramesses IX and his son *Nb maat Re* the overseer of Heliopolis. These two jambs were used as a doorway in the eastern wall because the lower lintel was found on a great block of limestone. They were restored (Pl. 4). In the eastern corner of the southern wall of this hall appeared a passage with two broken jambs and the lower lintel, they were without an inscription.

To follow this passage a great quantity of debris must be removed about five metres in height. The work began on 4th December 1965 and continued about forty four days. This work was the third season. The excavation revealed a great statue of limestone for Ramesses II (Pl. 5). The head was broken (Pl. 6) but it was found in the debris in a good condition; beside the head the right arm was found (Pl. 7). It was broken into two pieces. close to this statue appeared two pedestals (Pls. 8, 9).

Between them there was an enterance composed of five steps. The fourth pedestal is lost. on all sides of these pedestals there was the cartouche of Ramesses II. On the left side of the standing statue there was the figure of queen Nefertari.

The importance of this discovery that the jambs are part of an important building built by Ramesses IX in Heliopolis, the capital of the thirteenth nome in Lower Egypt.As it is well known that still standing monuments in situ, in Lower Egypt are rare and few, thus its significance more clearly appears.

FINDS

1.—*Fragment of representation of offerings and inscription* (Pl. 10)

Limestone.

L. 2,30 m, B. 0,80 C.

Fragment of a big limestone with hieroglyphic inscriptions painted yellow, red and blue, representing the bearers of offerings and the god Habi. Found ; ·n the foundation of the northern wall of the temple ˋ the king Ramesses II.

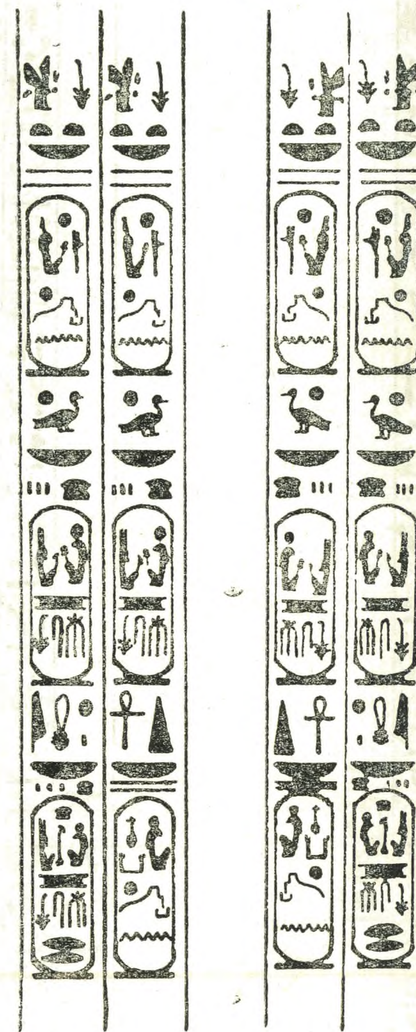


Fig. 1.—The facades of the two jambs



Fig. 2.—The right jamb

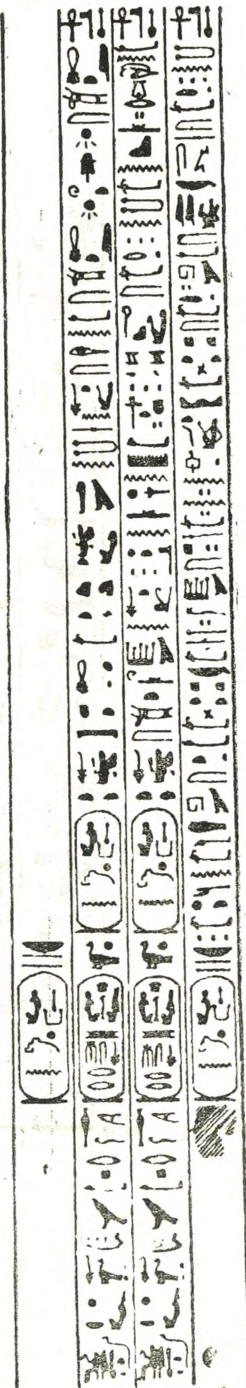


Fig. 3.—The left jamb

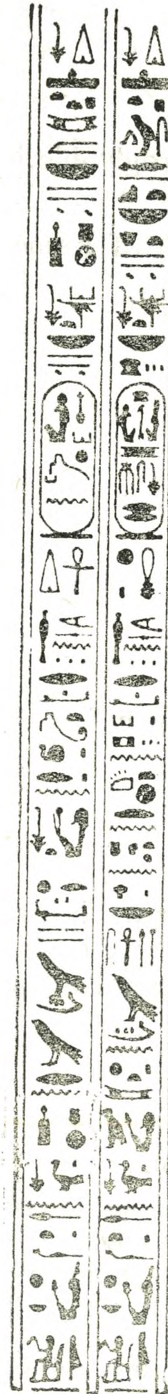


Fig. 4—The right jamb

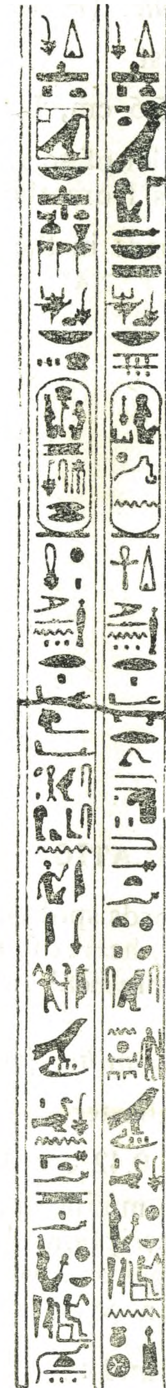


Fig. 5—The left jamb

2.—*Amulet* (Fig. 6 and Pl. 11)

Schist

H 5,5 cm, L. 4 C, W. 4, 7 cm.

amulet of scarab in schist with hieroglyphic inscriptions from the Book of the Dead.

Found: in the debris of the Temple of Ramesses II.

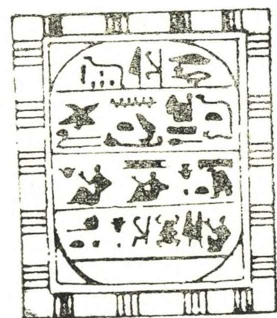


Fig. 6—The back of the scarab

TRANSLATION

Words spoken by Osiris, Pat-em-sawt, justified ; he says, my heart of me (or my beloved heart of (my) mother, heart (physical heart) of my existence (or being).

3.—*Mummification bed* (Pls. 12-13)

alabaster

H. 0.42 cm, L. 2,20 m, W. 1.05 m.

Mummification bed with damaged hieroglyphic inscriptions from the Book of the Dead on all its edges and vertical line on its back. might be reused as a cover of sarcophagus in the late period.

Found : in the debris of the temple of Ramesses II at the southern wall.

4.—*Pipes*

Pottery (Pl. 14).

Pipes of pottery with geometrical ornaments from islamic period.

Found: in the debris of the temple of Ramesses II.

Motawi Balboush

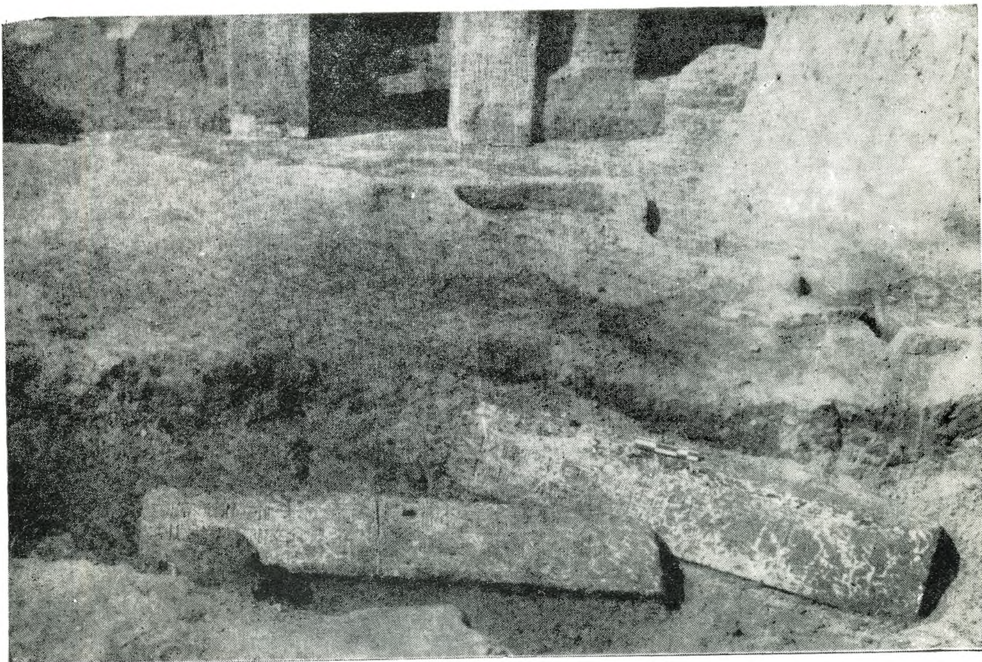
Pl. I



The two jambs



The facades of the two jambs



The other two jambs

Pl. III



The other two jambs after restoration



The standing statue of Ramesses 2



The head of the standing statue



The arm of the standing statue



The pedestals

Pl. IX



The pedestals.



fragment of representation of Offerings

Pl. X



The amulet of scarab



The mummification bed

PRELIMINARY REPORT ON THE EXCAVATIONS AT SAQQARA (1964) & THE DISCOVERY OF A TOMB FROM THE 5th DYNASTY

BY

MOUNIR BASTA

Nearly in the middle of the causeway of king Unas at Saqqara, and very close to its southern side a sudden subsidence took place. Digging began on the 24*th* of October 1964 to examine the depression and the surrounding site caused by the subsidence. The work ended on the 22*nd* of December 1964 with the discovery of a new tomb from the reign of king Neuserrēʿ.

The sand was so deep that it took a long time to reach the cliff (Pls. I.II). The excavation first revealed four square shallow shafts (Pl. III) ; two of which had no burial chambers. One shaft measures 80 cm. by cm. and 70 cm. deep, the second measures 80 cm. by 70 cm. and 180 cm. deep. The other two shafts end in small burial chambers on the southern side. One of these two shafts measures 80 cm. by 80 cm. and 230 cm. deep, while its burial chamber measures 160 cm long, 85 cm. wide, 110 cm. high and is empty. The second shaft measures 80 cm. by 70 cm. and 180 cm. deep. Its burial chamber measures 110 cm. long 80 cm. wide and 90 cm. high. There was found a contracted mummy wrapped in linen, which lay on its left side with the head to the north the face to the east, The absence of any burial furniture makes it difficult to precisely date these tombs, but the method of burial and the way of digging, suggests the early Old Kingdom.

Then the exacavations revealed another chamber hewn in the rock. Its entrance measures 180 cm. high and 70 cm. wide (Pl. III). One third of it was full of débris in which there were found many wooden coffins in a very disturbed state (Pl. IV). Some broken mummies in a bad condition had been thrown out of their coffins.

This group-tomb contained about thirty three wooden coffins. Some of them were coloured and inscribed They were all from the Late Period. The mummies were thoroughly examined and no objects were found. They were mummified according to the traditional method of that age. Some were completely covered with thick layer of resin, in a way imitating the nobles of the Persian age. Among these coffins, are three worth descrip tion :

1. One contained a mummy of a lady wrapped in painted linen (Pl. V). The face was coloured blue and yellow, and she had a painted pectoral, also blue and yellow. Below it is a winged kneeling goddess surmounted by the sun disk. A vertical line of inscriptions runs down the middle, flanked with the four sons of Horus (Pl. VI, VII). The lady's name is :

[hieroglyphs], "*Tȝḥȝ ir ȝty*", born of [hieroglyphs] "Irr hrȝ".

The determinative [hieroglyph] at the end of the lady's name indicates her Asiatic origin. It is not strange to find Asiatics in the Saqqara necropolis, because many of them lived in Memphis as merchants, especially in the Late Period. Petrie had discovered many terra-cotta figures having Asiatic features. They worshipped the Egyptian gods and adopted their beliefs concerning the life after death.

On this coffin a wooden Osirian statue ([1]) coloured white, blue, red, yellow and green was found . It measures 50 cm. high and its pedestal is 30 cm. by 14 cm. by 10 cm. According to the inscriptions on the statue it was clear that it belonged to the same lady, although there is a slight difference in writing of the lady's name and that of her father. On the Osirian statue the lady's name is written "*Tȝḥȝ irȝ*", and not *Tȝ ḥȝ i r ȝ ti*" as on the mummy. On the statue's back the father's name was

([1]) Actually the God Ptaḥ-Seker-Osiris.

written " Irr hrti " and not " Irrhrȝ " as on the mummy. Could it be a mistake on the part of the ancient scribe who was confused in the two names, and accordingly put the end of the lady's name [hieroglyphs] at the end of her father ? (PLS-VII, VIII, IX).

2. The second wooden coffin is an uncoloured one, made of sycamore wood. It contained a mummy covered with bead-network, which was common in the Saite age, but died out soon after. The beads are blue black, brown and white cylindrical and ring beads. The face and the collar are represented in small coloured beads woven together on thread. Under the collar are the following designs, also in small coloured beads, a winged scarab, two kneeling winged goddesses, Isis and Nephtys, four genii sons of Horus, and at the bottom a vertical line of inscriptions :

[hieroglyphs] (Pls. X, XI).

3. The third wooden coffin was also of uncoloured sycamore, but had real flowers on the lid (Pl. XII). It contained also mummy covered with bead-network representing the face, the scarab, the winged goddess, the four genii and a vertical line of inscriptions, headed by a couchant jackal all worked in coloured faience beads.

Unfortunately the thread holding the beads had rotted, and much of the Covering had fallen on the two sides of the coffin. It was difficult to read the name of the deceased. (Pl XIII).

It was remarkable that the mummies in the coloured coffins had no bead-network or coloured bandages. These adornments only occcurred in the uncoloured coffins.

Six small wooden boxes were picked out of the debris. Three were painted black, and were empty, two were uncoloured, and were also empty. The sixth one was decorated with vertical lines in red and black and on one

side is depicted a double - leaf door closed by two bolts (Pl. XIV). A wooden Osirian statue with two vertical lines on the front and the back was picked out of the debris. It is 53 cm high and stands on a pedestal measuring 24 cm by 11 cm by 7 cm. (Pls. XV XVI).

Inscrp. on front : "Utterance said by Osiris first of the westerners, the great lord of Abydos, he may give a good burial, behold ....."

Inscription on the back : "the revered before Osiris, (Nhri irr ʿwꜣ) son of (P f ii) born to (Ḳnpḳ ʿẖm ʿꜣ ist).

Some wooden boxes were found with the coffins of the late period. They contained pottery vases full of white material and were covered with disk shaped pottery stoppers tightly adhering to the mouth, all were wrapped in linen. It was observed that a broken vase contained a dark brown material mixed with white particles. Samples of the substances were sent to the laboratory to be examined. The analysis of the samples indicated that they contained fatty materials. Dr. Zaki Iskander reported that this material was the remaining substances left from the mummification process.

The clearance of the debris revealed three shafts in the floor of the chamber. One of them ended in a burial chamber containing a contracted mummy, without bandages or funeral objects. The other two burial chambers were empty. Two uninscribed false doors were found on the wall above the shafts.

In spite of the lack of funeral objects it can be easily deduced that the hewn chamber served as a tomb-chapel in the early Old Kingdom. After thousands of years it was re-used as a community tomb.

The excavations also revealed another hewn chamber at a lower level which can also be dated back to the early Old-Kingdom, but was also re-used in the late period as as community tomb. When discovered it was full of broken wooden coffins. The roof had collapsed and fallen on the coffins. (Pl XVII) The floor contained

eight shafts which can be dated back to the early era of the Old Kingdom, exactly like those discovered in the previous mentioned hewn chamber.

This suppositions can be easily deduced from the following facts.

1. The entrance of the chamber is now under the causeway of king Unas which indicates its priority to the fifth dynasty.

2. The mummies were contracted.

3. They were wrapped in brownish linen probably immersed in embalming material as at this time the mummification process was not well advanced.

4. The pottery found with the mummies were .rough vessels.

5. The way of cutting the shafts was more advanced than that of the archaic priod.

6. A broken wooden head-rest with two fluted supports was found in the debris of one of the shafts ; it appears to be an imitation of the fluted columns of King Zoser'stemple.

Moreover the excavations revealed three hewn chambers containing shafts of the early Old Kingdom era. Although they were robbed of their contents, a limestone statue of a standing lady was found in a niche. (Pl. XVIII, XIX). The head is missing, but two lines of inscriptions on the two sides beside the legs indicates that her name was (Nḥbt k3) and she bore the title "Aquiantance of the king". The statue measures 47 cm high and 17 cm broad.

THE DISCOVERY OF A NEW TOMB

On the 12*th* of November 1964, while cleaning a shaft on the surface of the ground, (Pl. III) excavations revealed an inscribed wall at a depth of three metres. The work proceeded, and I descended by a ladder taking

a kerosene lamp with me. By a quick look I realised that an hitherto unknown tomb had come to light. It was indeed a thrill when I crept on my hands and knees, accompanied by the chief workman holding the lamp, and penetrated into the newly discovered tomb. It consisted of a small square hall nearly full of sand, and another large rectangular hall with decorated walls, and which was full of broken, disturbed mummies. (Pl. XX) .

It was clear that much work would be needed to clean the tomb. It took four days to clean the small hall, that contained a false door bearing the name of the deceased "Ḫnm-ḥotp". There had been another False-door beside it but unfortunately this had been completely ruined by the robbers in the past. The scene between them attracted my attention because it had never occured before in the Saqqara tombs. It represented two standing men embracing each other, and surmounted by four vertical lines of inscriptions ending with the two names of the tomb owners, "Ḫnm-ḥotp" and "Ny cnḫ - Ḫnm". They occupied similar professions, as each of them was the manicurist of the king and the inspector of the manicurists of the palace (Pl. XXI) Clearance of this hall revealed fragments of cart nnage and a wooden statue of the goddess "Nephtys, coloured yellow, blue, green, and black, and measuring 30 cm high (Pl. XXII). At the back of the false doors, there was a small rectangular room full of sand ; when it was cleaned nothing was found except some parts of the fingers and toes of a wooden hand and foot. It is quite probable that it was the serdab of the tomb and it measures 313 cm long, 185 cm wide and 195 cm high. A narrow opening in the noith end of the false door wall proves that idea. This serdab is not in its traditional position, but presumably the architect was obliged to adopt such an arrangement (1).

The doors in the eastern wall of this hall lead to a larger chamber, also full of broken and disturbed mummies in a very bad condition. They were certainly late

(1) Similar examples were found in the Old Kingdom tombs in the Giza Necropolis.

period burials. Clearance of these mummies revealed many pieces of cartonnage representing Anubis and other deities, which had been attached to mummies according to the funeral customs of that age.

A wooden Osirian statue was found under these mummies, measuring 55 cm high and bearing three vertical lines of inscriptions on the front, and one line on the back (Pl. XXIII). Some other objects were found:

1. Parts of wooden, decorated chests (Pl. XXIV).
2. Wooden Ḥorus statues, some with the Atef crown.
3. Coloured wooden Atef-crowns.

On the floor of this large hall, and close to the west wall, two small offering tables of limestone were found. One had the name of "Ḥm-Rc" (Pls. XXV), who was represented sitting with his wife, who was named Ṯst, while their elder son Ir-n-Ḏḥwty offer to them, thousands of birds, beer, bread and bulls. He bore the title of a Judge and scribe like his father but the father also bore the title of priest of the sun temple of "Ny-wsr-rc".

The second limestone offering table was made for the wife, Ṯst, the acquaintance of the king , priestess of Neit and Hathor. (Pls XXVI).

When the clearance of this hall came to an end, it was obvious that the main entrance of the tomb was closed with big blocks of stone, mortared with mud (Pls. XXVII).

To avoid a collapse it was decided to keep it blocked, until we could remove these stones safely. The spot was studied from outside and the measurements indicated that the entrance was under the causeway of Unas.

Accordingly the work took place outside the tomb, and ended with the removal of the huge blocks of the causeway with which the entrance was blocked in the time of king 'Unas,' and made it inaccessible since that early time. Pulleys were used to move the blocks aside. When the entrance was liberated, the lucky find of a stone bearing the cartouche of "Ny-Wsr-Rc (Pl. XXVIIII) helped to date the tomb more precisely because there is no

mention of the, king's name inside the tomb. The lintel was also discovered (Pl. XXIX). The inscription on it reads : "May the king be kind and give, may Anubis, who is in front of his divine booth, be kind and give, that they will be buried in the necropolis.(1) (After)a-goo d and a great old age, as honoured lords before the great god".

"The chief of manicurist (ỉmy-r ỉr (yw) ʿnwt pr ʿ3) (2) of the palace, the trusted one (mḥnk nswt) (3) by the king who is over the secrets (Ny-ʿỉ ḥ — ẖnmw)

The same titles preceeded the name of "H̱nmw - ḥotp".

The clearance of the debris in front of the entrance proceeded and revealed the court of the tomb. All the upper parts were lost except about nine slabs, among which is one bearing the name of king "Ny - wst - rʿ". The lower uninscribed parts are still in situ.

The drum of the entrance was inscribed by the two names of the tomb's owners. (Pl. XXX).

In the floor of the big hall four shafts were discovered near the eastern wall.Each ended in a burial chamber cut roughly in the rock. All were empty. In the débris of the last shaft to the south fragment of a wooden plate and a part of the head of a wooden statue were picked up. They were of the old kingdom type. Certainly they were broken by the early robbers of the tomb. The first shaft measured 150×140 cm. by 340 cm deep, second 120×120 cm by 250 deep, third 105×100 cm by 365 cm deep, fourth 85 × 85 by cm 340 cm deep. This last one led to many other burial chambers hewn in the rock

(1) The falcon Horus on the standard is replacing the sign [hieroglyph] in [hieroglyph] ḫr.t ntr.

(2) "ỉmy-r ỉr (yw) ʿ nwt pr-ʿ3". The expression ỉrr ʿnwt "make the nails" is mentioned in Wörterbuch, vol. 1. p. 188, 3. Montet gave the translation "manicurist" for the title in Kèmi IV (1931, 1933), p. 179 Junker studied this title in his article in the (österr. Akad der Wiss., Sitzungsber. Phil. hist. Kl. 233/1) p. 12. He noted that this title appeared also in the tomb of Ptahshepses at Abou-Sir.

(3) "mḥnk nswt" is also studied by Junker in the same article (p. 13-18). "Vertrauter", which can be translated" a man of confidence". This epithet correspond to a category of people who work around the king or a man of high personality.

in the late period. They are full of plundered mummies, wooden coffins and broken shawabtis, some of them bear the name of king "Psametik".

Below the entrance, an inclined corridor was discovered. It was blocked with big rough limestone blocks. This aroused our hope of finding the burial chamber intact. After three days of hard work, we were disappointed when we came to the two burial chambers and found that they were completely robbed of all their contents. There had been two limestone sarcophagi, one was found in situ without its lid, the second was completely destroyed. No objects were discovered except some model votive alabaster plates. In the late period two shafts were excavated in the floor of the small hall of the tomb to give access to the burial chambers in order to reuse them. Many wooden coffins dated to that age were discovered there. They were, mostly extended to the south and the west in order to leave room for a great quantity of coffins through that very long period.

In my point of view the tomb was robbed of its contents in the Intermediate Period when the Government was very feeble, and unable to guard the necropolis Eeven the king's tombs were plundered and robbed of all their contents in this time. As the tomb's entrance was blocked in the reign of king Unas by his causeway, the robbers did not find any way in except by breaking through the roof of the small hall from which the tomb was discovered and then excavating a shaft in the floor of that room, penetrating through it to the two burial chambers. It was left open till it was reused again in later ages, when the people sought eagerly for any cavity to be exploited for their burials.

Description of the Scenes of the Tomb

(The plan PI.XXXI)

The facade ; (no. 1.2 in the plan.)

All the scenes are in high-relief (PI, XXXII, XXXIII). On the spectator's right hand the deceased "Nyʿnḫ ẖnmw" is represented standing, wearing the leopard

skin cloak of a high priest. He holds a staff in one hand and the ḥrp-sceptre in the other . His body is coloured red, his hair and his false beard are black and the dress is left white. His son stands in front of him, no taller than his knee ; he holds the end of his father's staff. The deceased's name is in front of his face. A vertical line of inscription indicates his titles as the priest of the sun temple of Abu-Gorab, the chief of the manicurists in the palace, the one of the confidence of the king, and the one who is over the secrets.

The inscriptions above the son show that he was the elder son, who occupied the profession of a judge and a scribe ; his name was "Ḥm. Rᶜ".

On the spectator's left hand the deceased "H̱nmw-ḥotp" and his son "Ptaḥ - šps" are represented. The scene and the inscriptions are similar to that of "Ny-cnḫ-H̱nmw" with one exception, the son of the latter holds a handkerchief in his left hand while that of H̱nmwḥotp" holds a bird. Moreover this son is represented as a child with a side lock of hair but the other is represented as a mature man.

On the lintel a long text of two horizontal lines is carved in relief. (The text has been previously translated).

Left jamb (no.3)

Here are four registers representing offering - bearers and priests. The first register, four priests are carrying birds ; in the second ; six men are bearing bread and vegetables ; in the third six men bearing corn ; and in the last register two men are leading two bulls, of different size. The first man is like a shepherd.

On the right jamb (no 4) there are four registers, also representing offering - bearers. In the first register, four men carry birds, leg of beef ; in the second, six men carry bread and birds ; in the third, six men carry kinds of bread ; in the fourth, two priests lead two different sized bulls.

INSIDE THE TOMB

The North wall : (*No* : 5)

Four registers are represented. The upper one shows four men, led by a certain personality (perhaps a policeman) coming to pay taxes to the standing scribes and another official who is seated. In the 2nd register are seven granaries and four persons carrying corn, and a fifth receiving what they bring. In the 3rd register are two big heaps of corn and two persons one of whom is working ; the other gives orders.

4th register : three women and two men winnowing corn.

East wall : (no : 6) - On the extreme noth end , the deceased - H̱nmw ḥotp - is represented standing with a staff in one hand and a handkerchief in the other, he is coloured red. and his son-Ptaḥ-šps in front of him, is coloured yellow and has the side lock of a child. An umbrella-bearer stands behind the deceased. In front of him are three registers of scenes. Upper register represents the cutting and carrying of papyrus by six workmen; then ploughing, sowing and treading in the seeds by rams. In the 2nd register ; reaping the harvest, a fatigued peasant sitting drinking ; then asses carrying sacks of corn moving towards the deceased who is standing superintending the works in the field.

3rd register :

A scene of six peasants running behind six unloaded donkeys.

4th register :

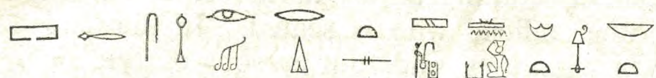
A scene of the work in the field, some peasants are heaping corn while others feed the bulls.

The middle part of the east wall :

The deceased "Ny-cnḫ H̱nmw" in a sedan chair carried by six men, goes down to inspect the work in the field. In front of the sedan are a hound dog and two men, but behind are three men ; two carry some objects, the third looks like a chief.

The south part of the east wall :

The deceased "Ny-ʿnḫ - Ḫnmw" is sitting on a big chair looking at the craftsmen, every group is busy in a certain work. The text in front of the deceased reads :



"The inspector of the manicurist of the palace is writing (to) all work and crafts. "The craftsmen are depicted in three registers ; the upper register represents the sculptors carving a statue of the deceased, which is depicted in several positions. (Pl. XXXIV).

2nd register : represents metal work with furnaces and goldsmiths blowing fire, and beating out gold-leaf.

3rd register : jewellery scenes and carpenters making chairs, beds, and head-rests.

At the bottom of the wall a long row of peasant women with offerings of many kinds, bread, vegetables, fruit and also leading gazelles and gcats tied with ropes. Similar scenes cover many walls in Saqqara tombs.

The deceased "Ny-ʿnḫ - Ḫnmw" is standing looking at all the work . The inscriptions in front of him read "Seeing the work in the tomb, of all the craftsmen of the inspector of the manicurist of the palace."

(South Wall) "no. 7"

1st register (upper) : the two owners of the tomb on either side ; each sits on a big chair with an offering table in front of him Between the two offering tables is a heap of offerings.

2nd register : a scence of twelve musicians and singers, some play the harp, and others play the flute.

3rd register : On the spectators right hand is a group of eight girl dancers preceeded by the son "Ḥm - Rʿ" shown as a child , in front of them are six clappers, on the left hand a group of three dancers and tow clappers.

West wall.

N° : 8 : Three priests in three rows each bearing offerings.

N° : 9 : The two deceased are embracing each other. (Pl XXX) Remark Ḫnmw-ḥotp putting his right hand on Ny-ʿnh - Ḫnmw's shoulder while the latter is holding the left arm of Ḫnmw - ḥotp. This scence is repeated on two other walls. Indeed it is very unusual scene, and it is not found anywhere else in the Saqqara tombs. The importance of the discovery of this tomb can be connected with this unique scene. The inscriptions of the tomb do not lead us to any solution, concernig the relationship between the two deceased. Were they two brothers ? Were they the father and the son ? Or were they two officials in the king 's palace who had enjoyed a cordial friendship in life and wished to keep it after death in the nether world. ?

N° : 10 : The two deceased are fowling and fishing in the papyus swamps of the Delta. Eash is standing in a small boat with his son and his wife. Ḫnmw - ḥotp is fishing with a harpoon, Ny - cnḫ - ḫnmw is fowling with a boomerang. Both of the sons are accompanied by two titles, "judge" and "scribe" Ḫnrwt is the name of Ḫnmw - ḥotp's wife, Ḫnt - Kȝ ws is the name of the Ny-ʿnḫ-ḫnmw's wife.

On the other part of the wall there are three registers :

1st register : making pottery, the furnace for baking the pots ; a tired old man sitting drinking from a big pot offered to him by another workman. (Pl. XXXVI) Then workmen making mats.

2nd register : cow giving birth, feeding it, and milking the cow under a shelter, the butcher hangs up a slaughtred gazelle and custs off a part of it with a knife. (PL. XXXVI). Behind him a squatting man looks at the butcher.

3rd register :two boats loaded with bundles of papyrus and lotus. Eight bulls with big horns are crossing

stream. Behind the bulls a peasnat holds two bundles of payrus and lotus. His legs and feet are represented in a way that shows the transparency of the water. All the plants are coloured green.

4th rigister : A quarrel between 18 sailors in five boats., they are armed with long sticks. The boats are loaded with bundles of papyrus and lotus the names of the two Ka - priests are "Ḫnw - ptaḥ" and Nfr-ḥr-n-Ptah.

At the bottom of this wall there are four false doors for the two deceased, the son Ḥm - Rc, and his wife "Ṯst." close to the two latter false doors, two offereing tables were found

N° 11 :

Ist register : two big bulls led by two men.

2nd register : three oryxes led by two men.

3rd register : two big gazelles ? with long horns, led by two men.

4th register : three geese drawn in a very artistic way.

The scenes on the walls no. 12,13, 14 are very similar to those mentioned in N°. 11.

The chamber of the two false doors

From this chamber the tomb was discovered , by means of a break in the corner of the roof.

Scenes on the east wall (*No*) : 15) : The two deceased are depicted standing and embracing each other . The scene is very similar to that on the outer side of the same wall. (No 9.). "Ḫnmw ḥotp" is on the spectator's left hand, "Ny - cnḫ Ḫnmw" on the right hand. The titles of the first can easily be read while that of the other are lost except his name, because the wall is broken.

Scenes on the west wall (*No.* 16) : The false door of "Ḫnmw-ḥotp". His name is on the drum. On the upper part the deceased is sitting in front of an offering table. On both sides the deceased is standing holding a staff. His name and titles are inscribed in front of him.

The false door of "Ny - cnḫ - Ḫnmw" was broken by the ancient robbers, in order to penetrate to the serdab-chamber, which was found full of debris empty of any funeral furniture. Between the two doors is a scene of the two deceased embracing each other. (PI. XXI).

Scenes on the novth wall (*No* 17) :

The deceased "Ḫnmw - ḥotp" is depicted sitting on a big chair looking to the east. His figure is drawn on a large scale. His name and titles are above him. His flesh is coloured red, the hair and chair are black. In front of him is the traditional offering table piled with offerings of all kinds. Then there are two rows of offering bearers. Those in upper row are bearing joints of meat and birds, in the lower row are the priests slaughtering a tied oryx. One of them is depicted as very lean and the chest bones can be remarked. The upper part of this wall is sculptured with different kinds of offerings, fruits, vegetables, and slaughtered birds, with a list of the kinds and quantities.

Scenes on the south wall (*No* 18) :

The deceased "*Ny - cnḫ - Ḫnmw*" is sitting on a large chair, looking to the east. The relief is on a large scale. All other scenes are similar to the north wall previously described. The colour of the deceased and other priests are lost except for some traces. It is noteworthy that the same priests are performing the rituals for the two deceased. This is clear from their names on the north and south wall.

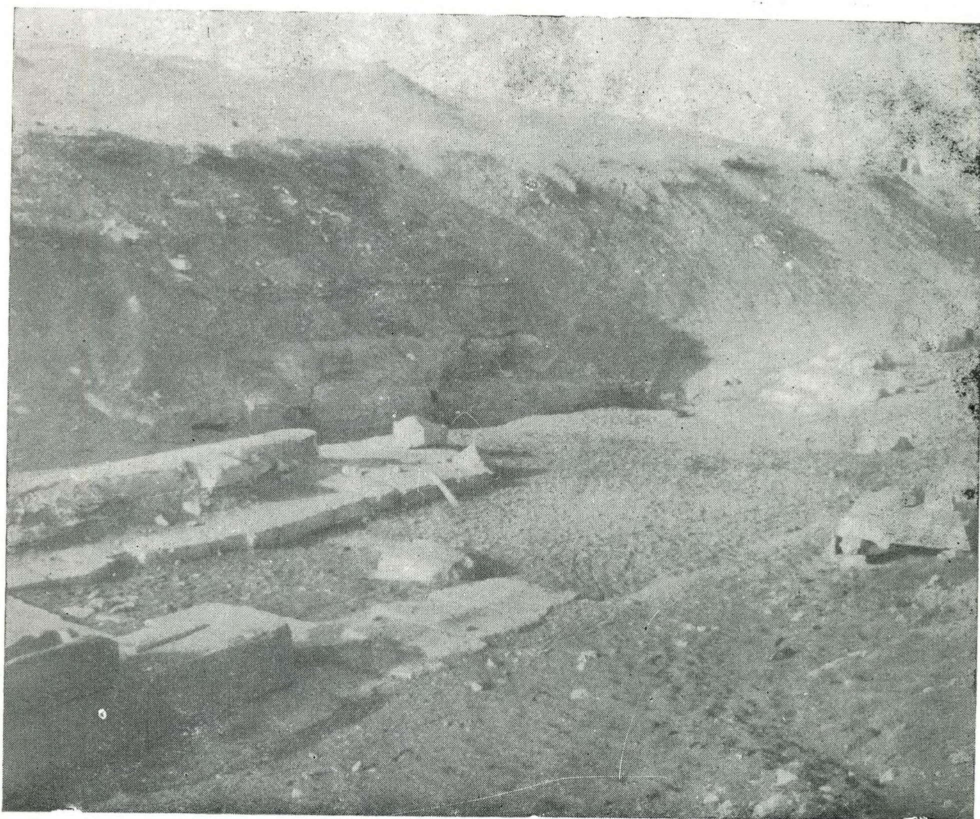
We hope to make complete publication for this tomb in the very near future.

MOUNIR BASTA
Chief inspector of Lower Egypt

Pl. I



The site before excavations



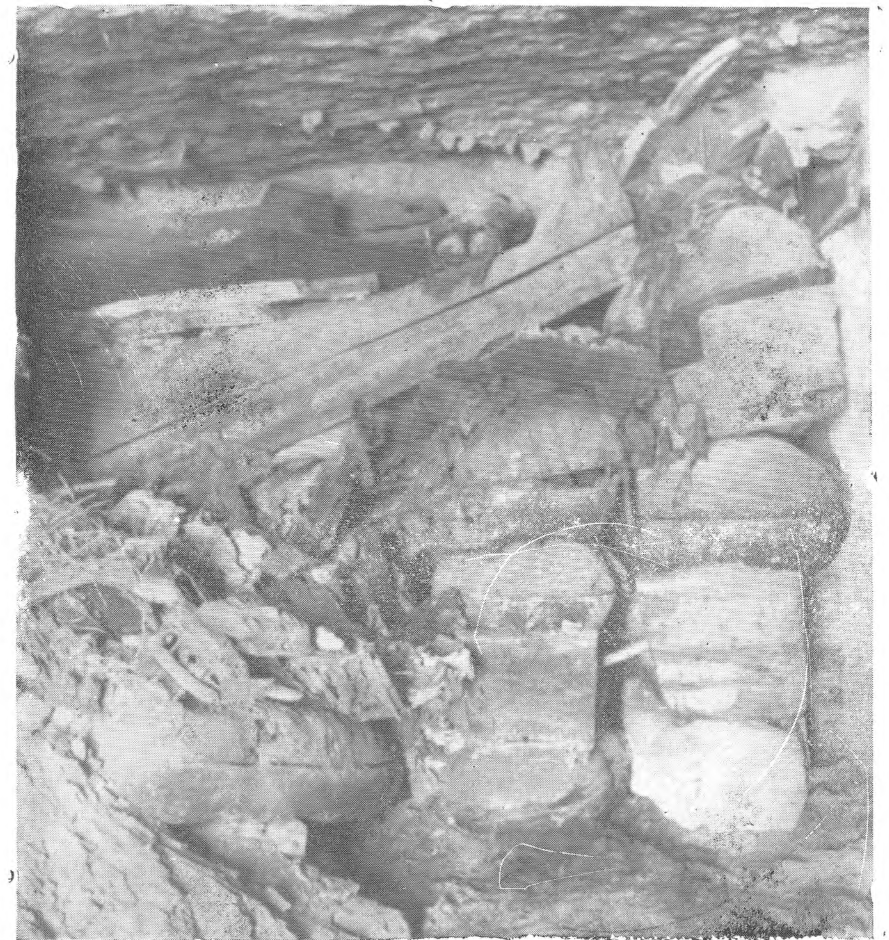
The causway of Unas and the cliff with the tombs excavated

Pl. II



The cliff with the four archaic shafts is the shaft from which the new tomb was discovered

Pl. IV



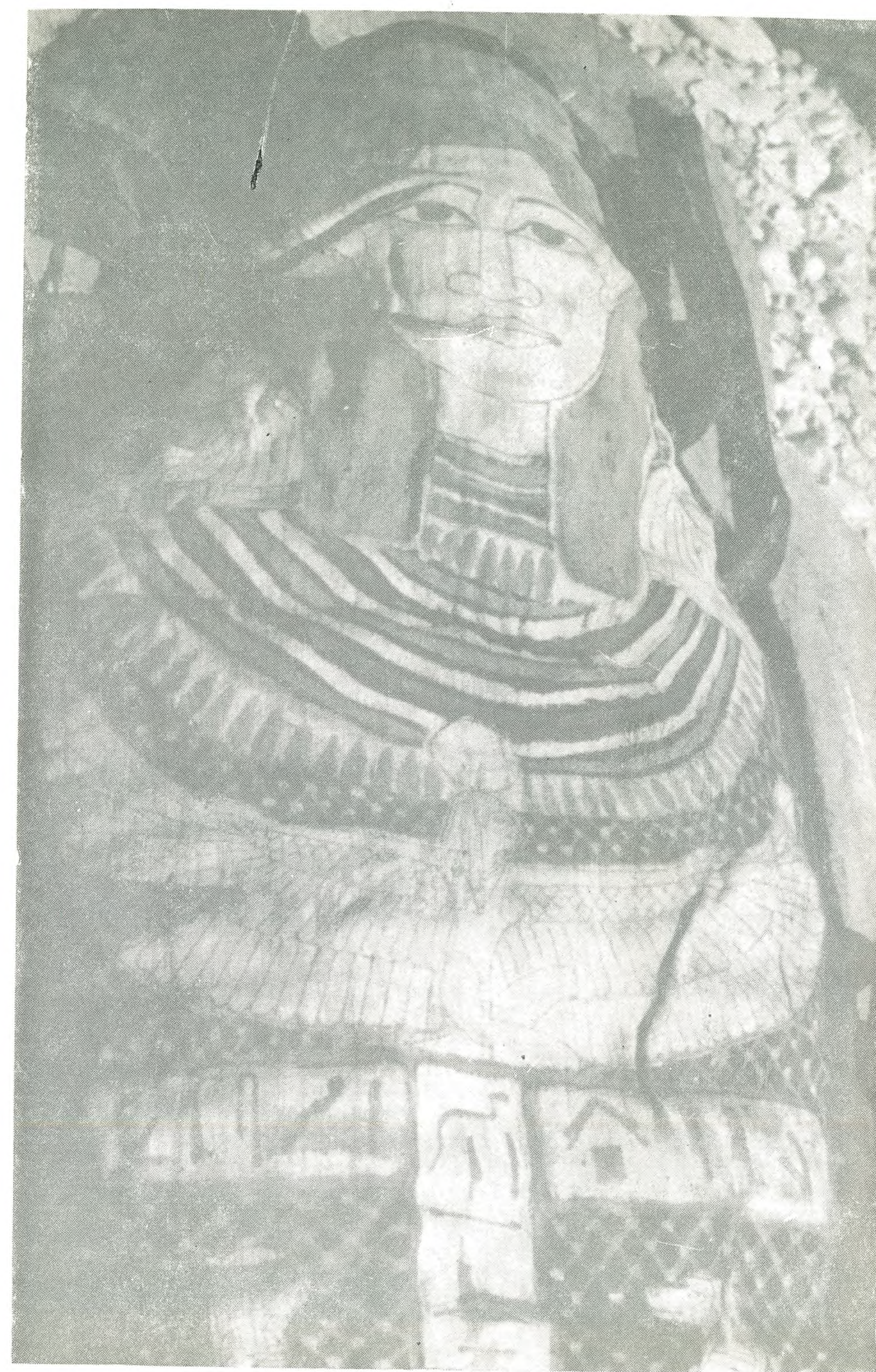
The disturbed coffins in the community tomb



The wrapped mummy



The mummy after being unwrapped



The upper part of the mummy of lady ‘‘Tэḥэyraty”

Pl. VIII



The Osirian statue of the same lady



The back of the Osirian statue of the same lady. "Təhəyrəty"

Pl. X



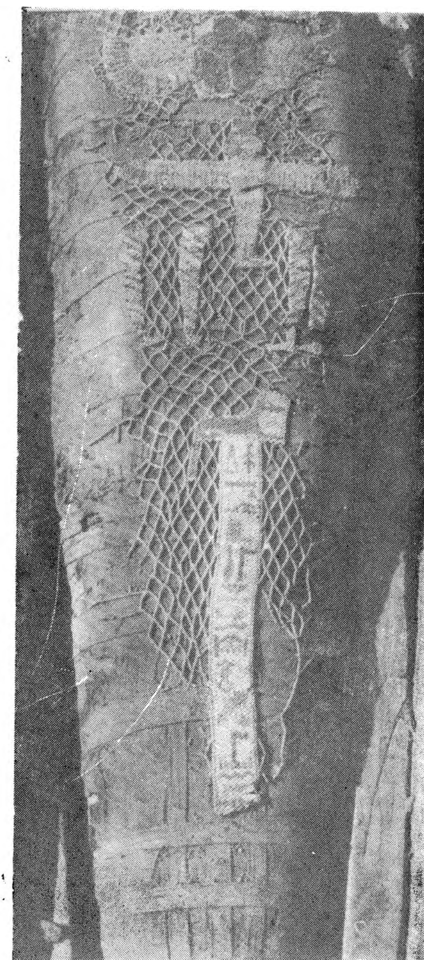
The mummy with bead-network



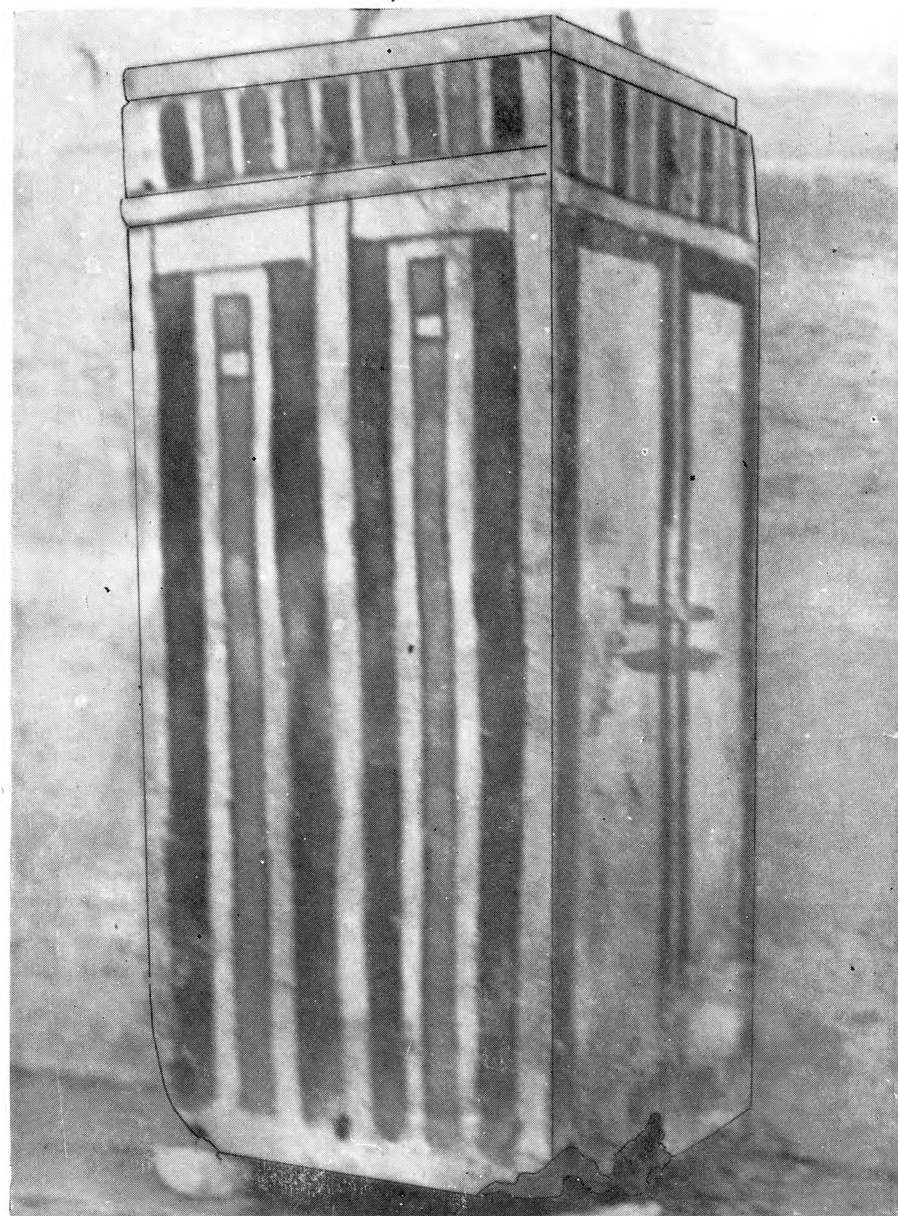
The upper part of the same mummy



The coffin with the flowers



The mummy with the bead-network



The coloured wooden box



The wooden Osirian statue



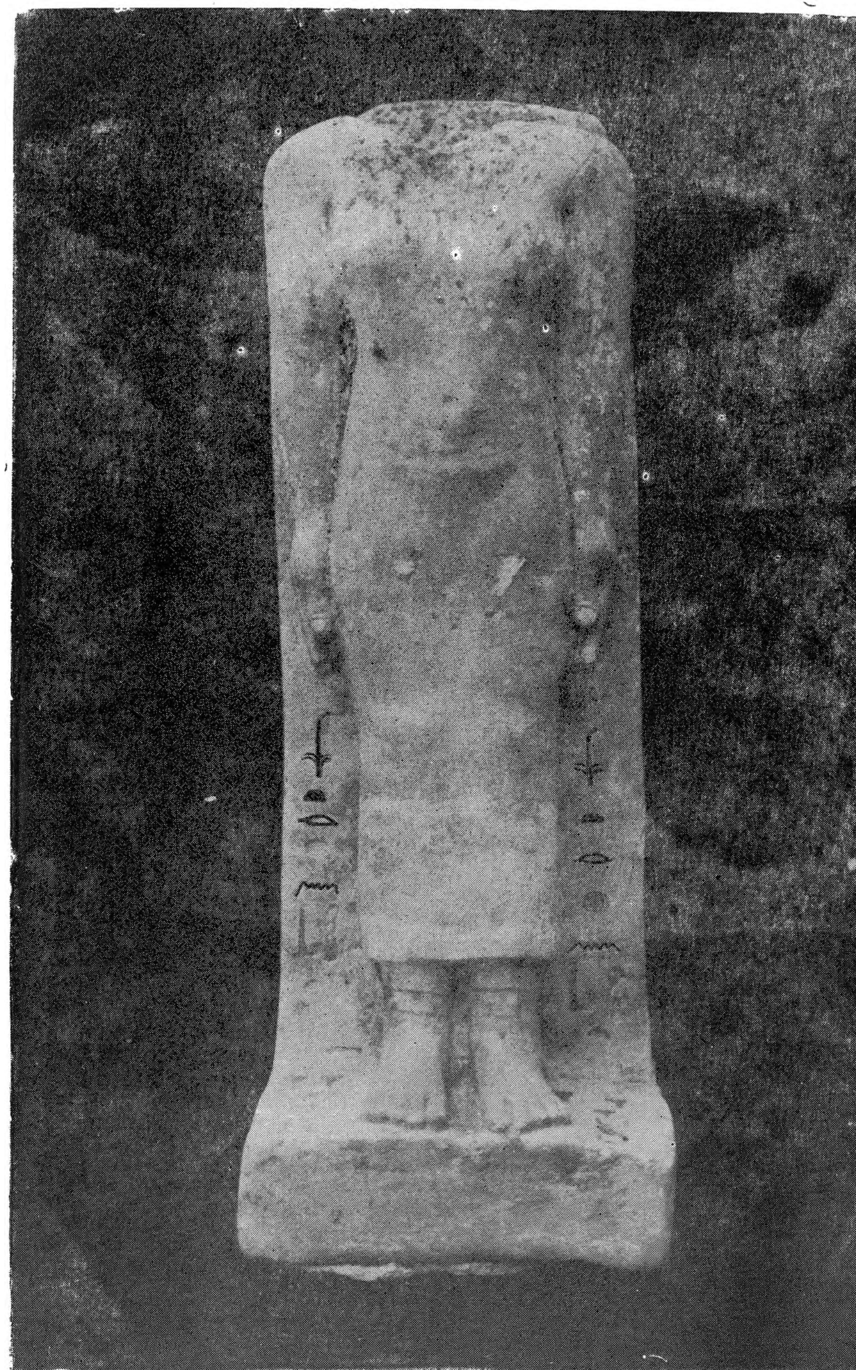
The same statue from the back



The disturbed wooden coffins in the community-tomb



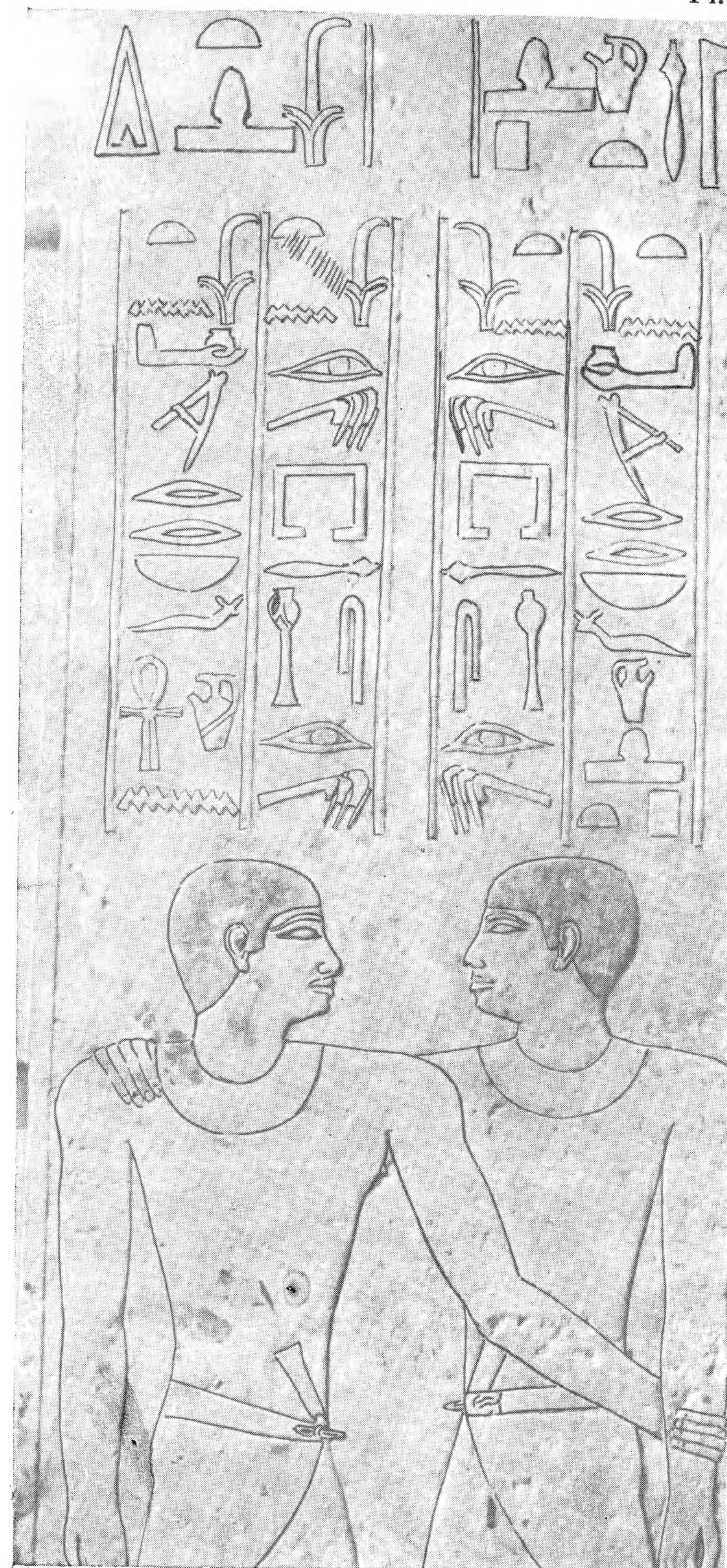
The statue of "Nḥbt k3" in the niche



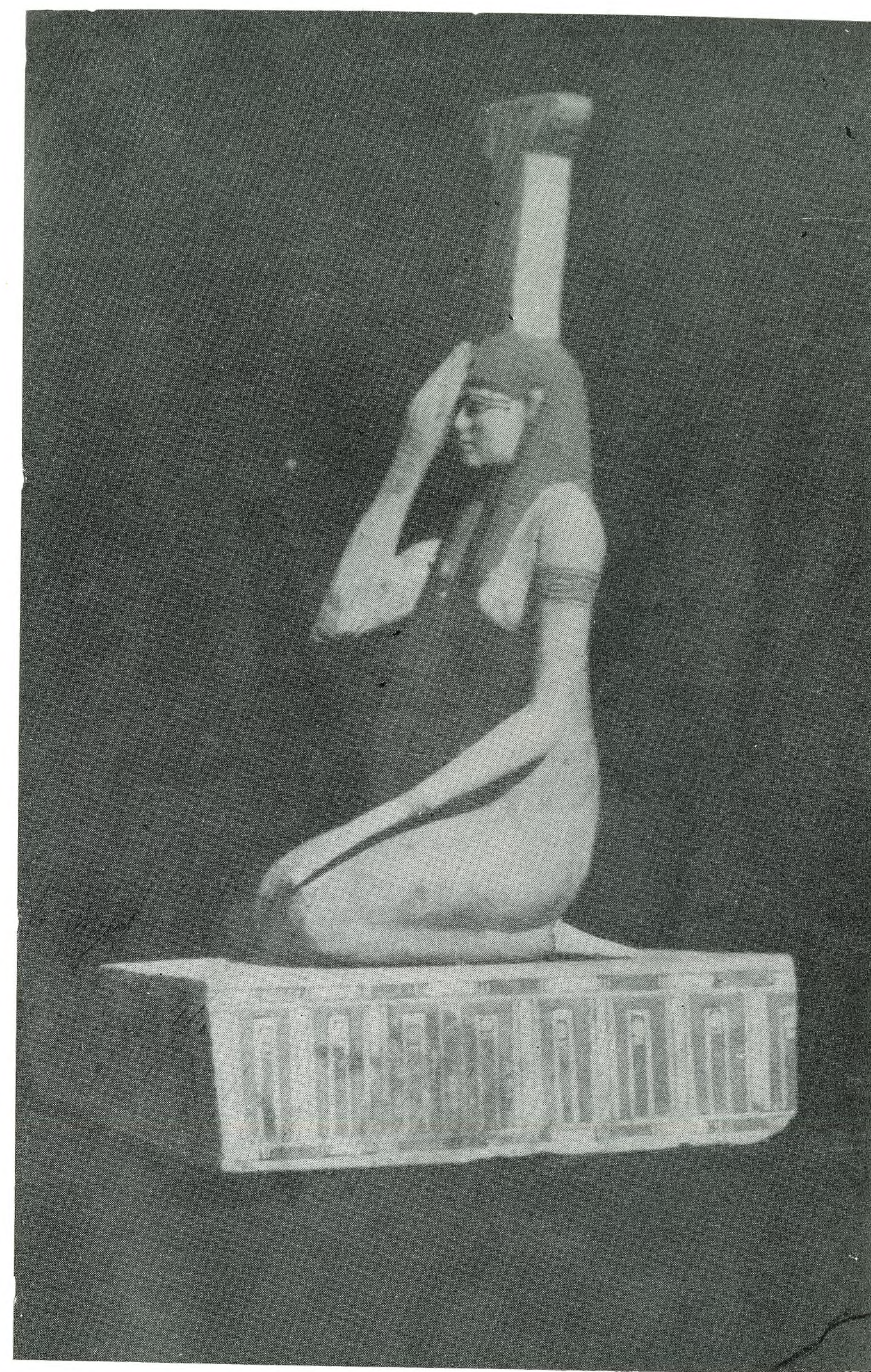
The statue of the lady, out of the niche



The big hall of the tomb full of disturbed mummies



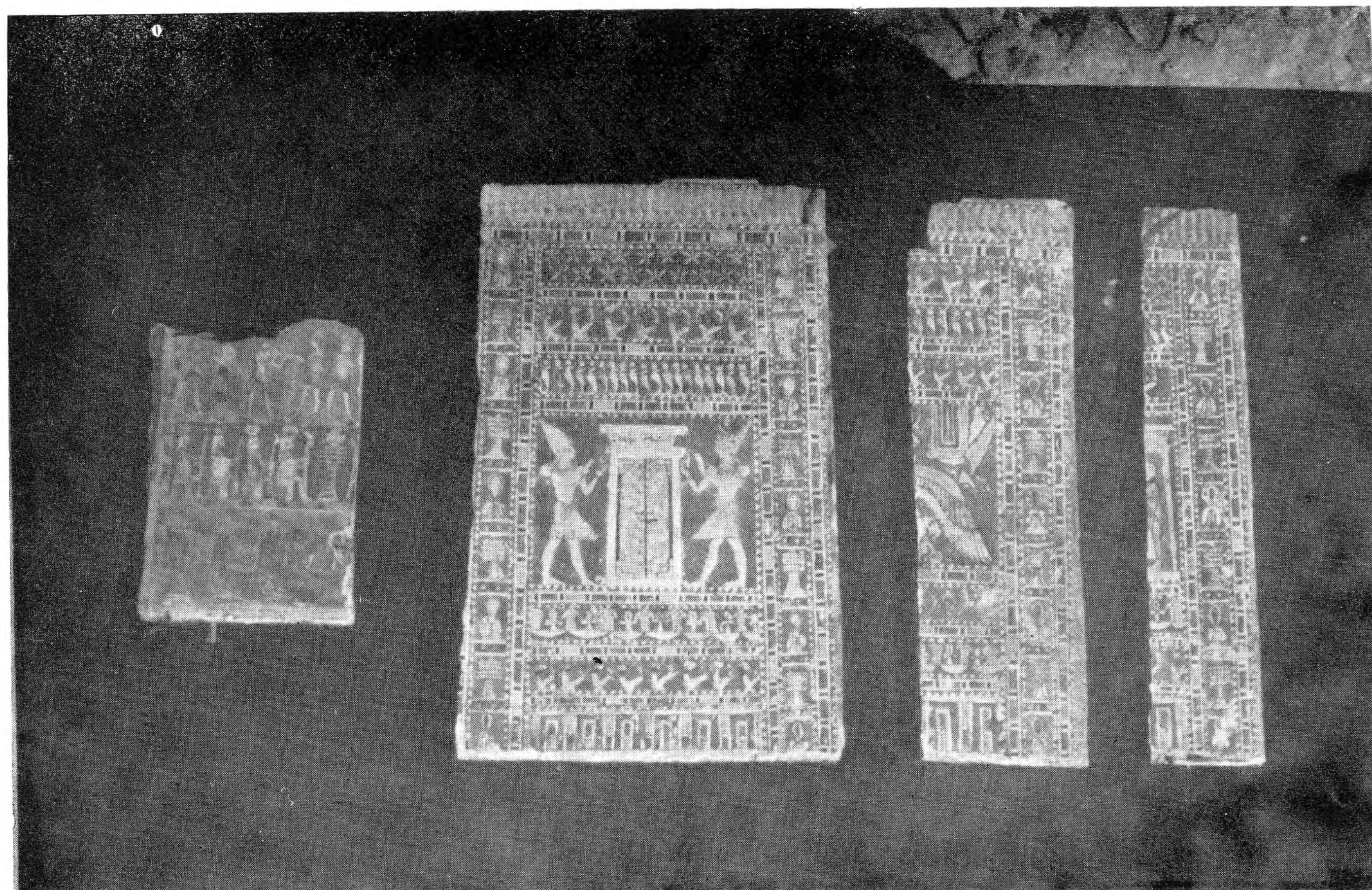
The deceased "Hnm-hotp"



Wooden statue of Nephtys

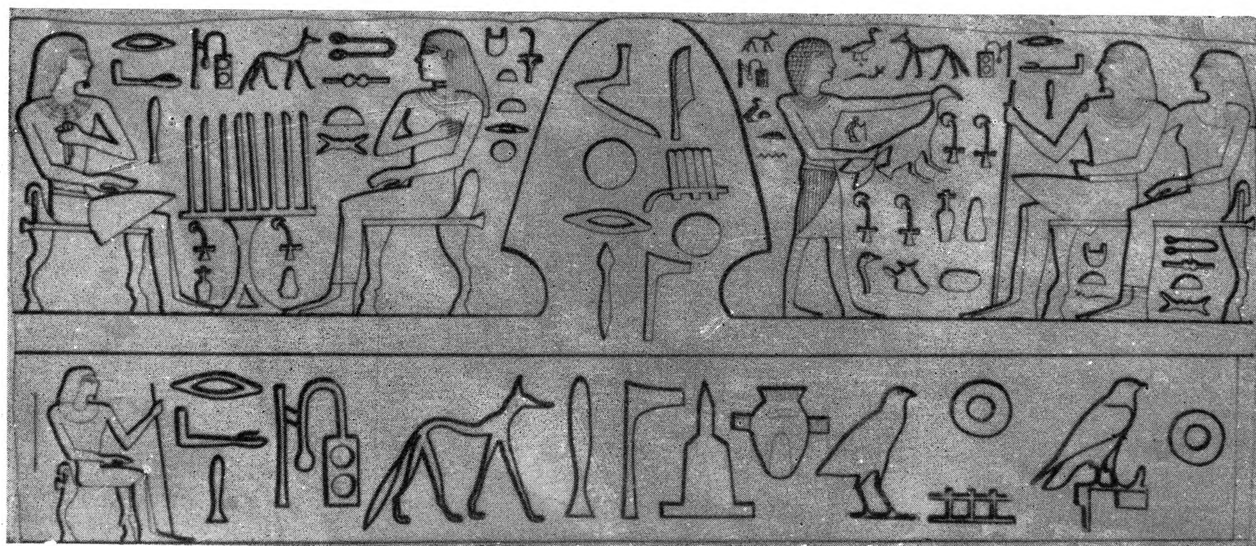


Wooden Osirian statue



Parts of decorated wocden chests

Pl. XXIV



Offering table of Ḥm-Rʿ and his wife "T̲st"

Pl. XXV



Offering table of Ṯst

Pl. XXVII

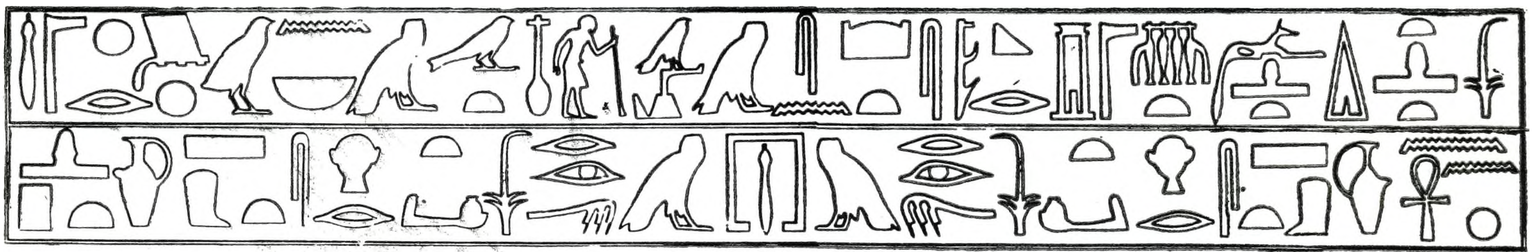


The blocked door at a distance



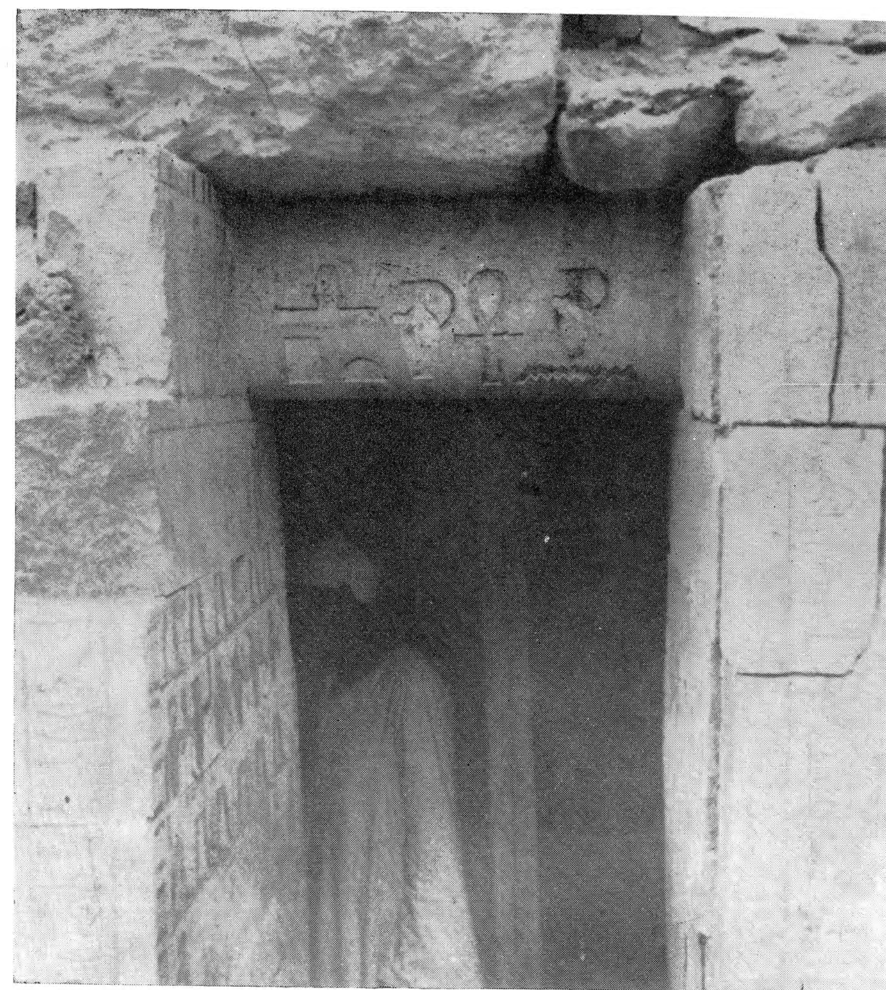
The limestone block bearing the name of king "Ny-Wsr-R"

Pl. XXVIII

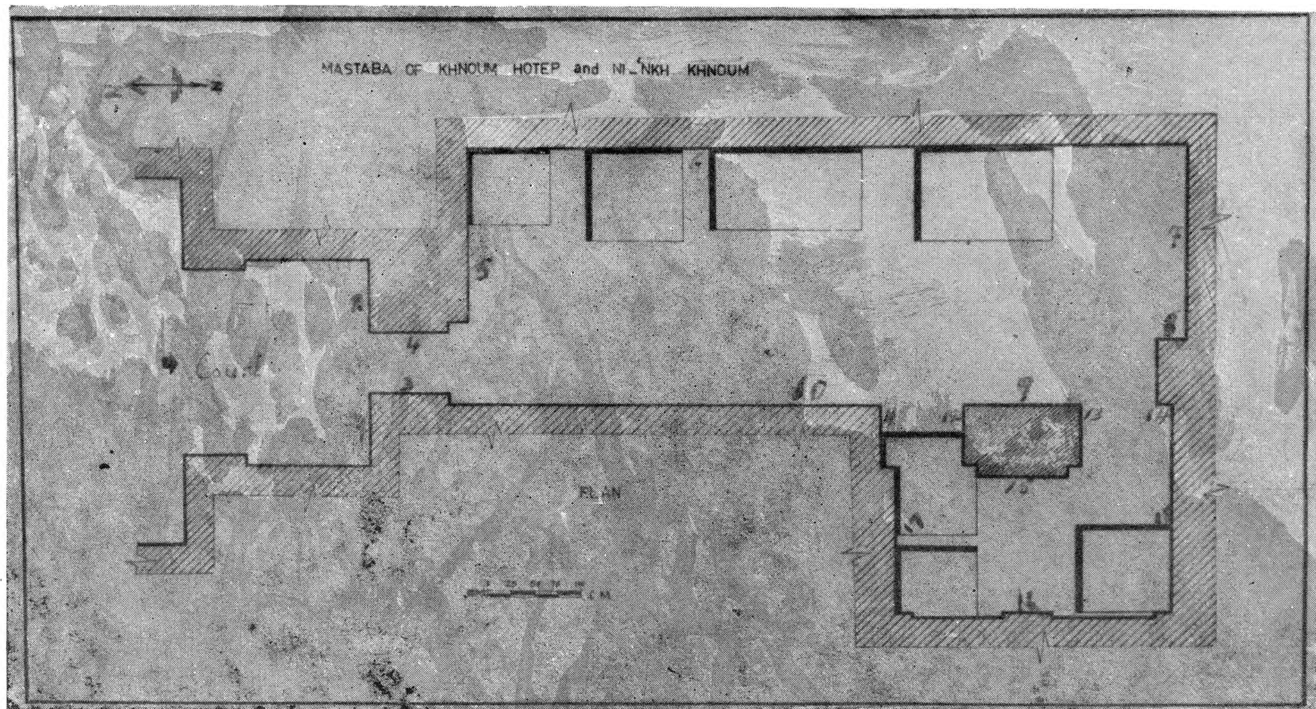


The lintel of the tomb

Pl. XXIX



The drum of the entrance of the tomb

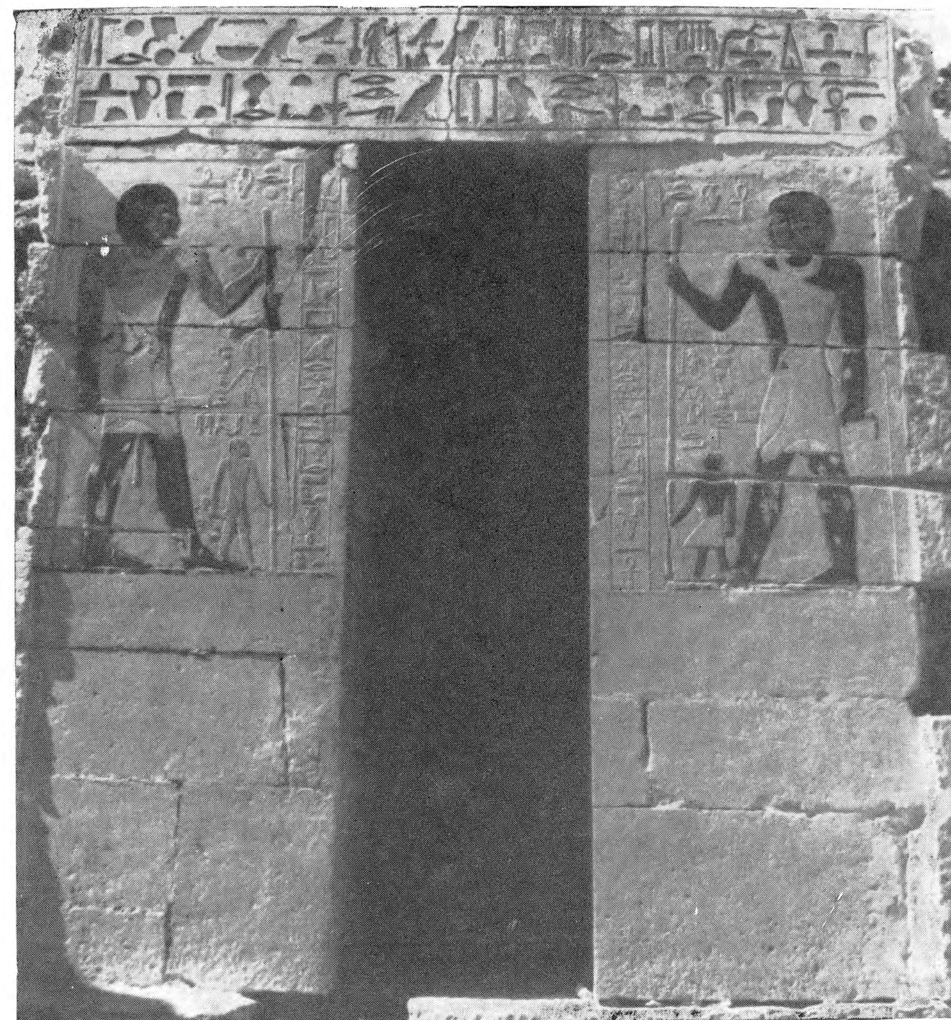


The plan of the tomb

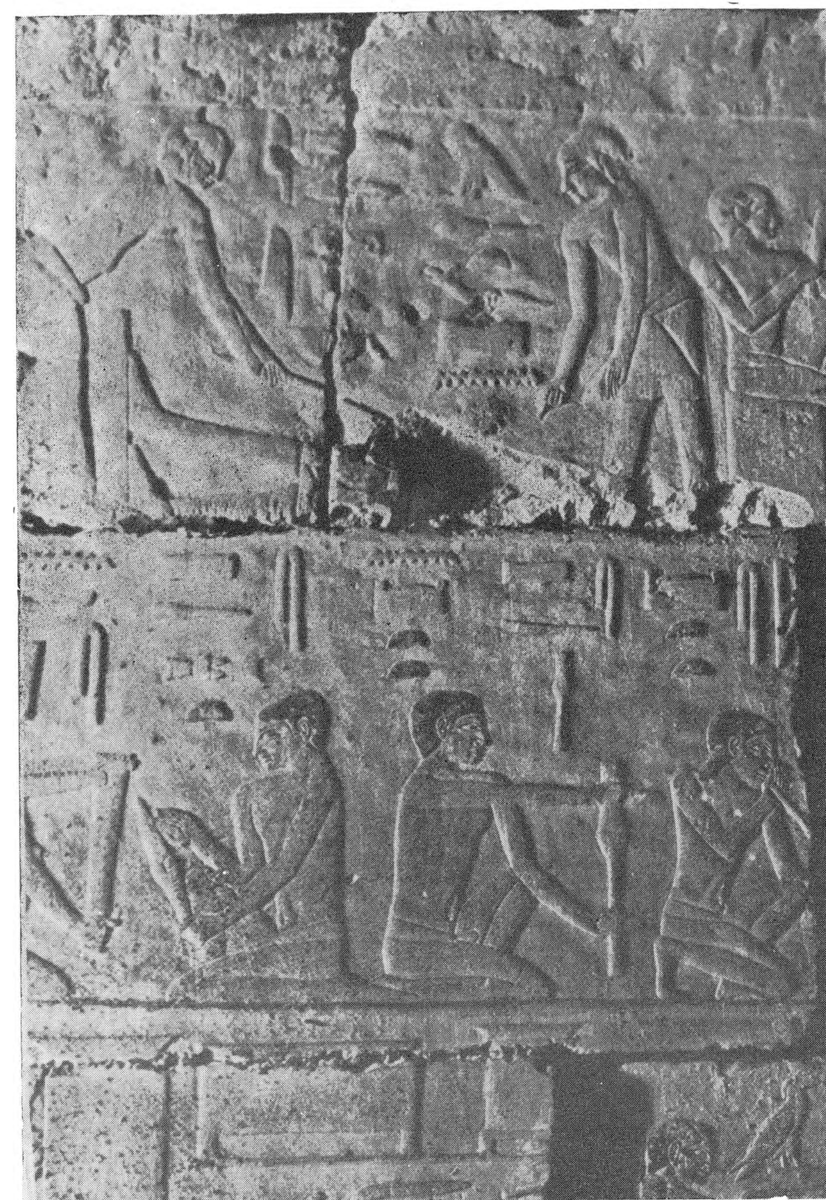
Pl. XXXI



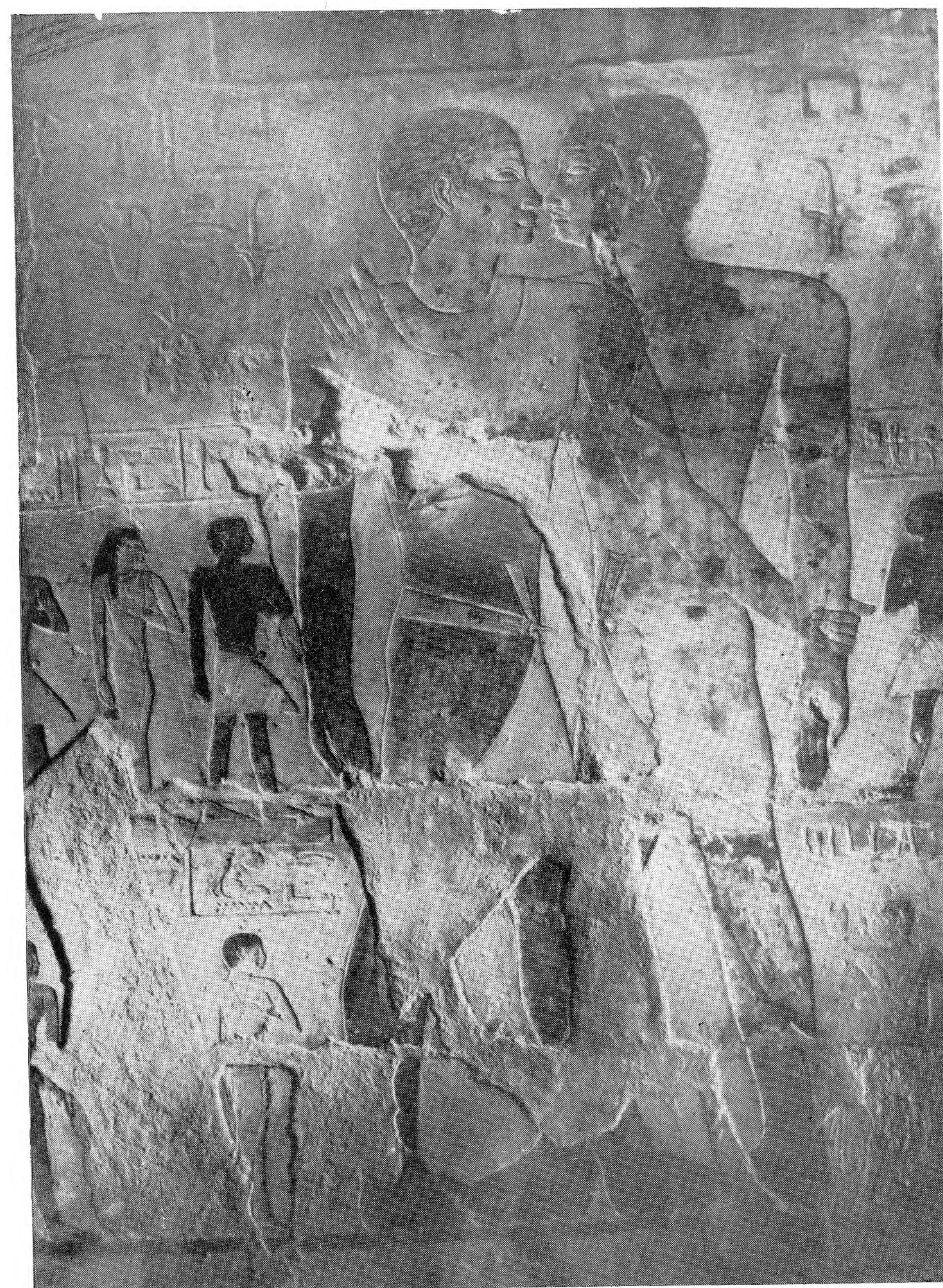
The facade before restoration



The facade after restoration



The deceased statue on the ground and other craftsmen. (east wall)



The two deceased embracing each other (east wall).



The fatigued workman and the butcher (west wall) .

ANOTHER VERSION OF THE BOOK OF THE DEAD

(Chap. 128-134)

From Papyrus Cairo Museum S. R. 640

BY

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INTRODUCTION

The papyrus in question here is numbered Cairo Museum special register 640 and is located in P. 29, rayon 4. It is now mounted on seven blue cardboard sheets, each approximately 53 cms X 40 cms. The papyrus itself, light beige in colour with a few darker spots, is in very good condition. It is about 11 cms high and 422 cms long. Of fairly thick texture, the papyrus roll is made of 27 sheets, the right hand one overlaping the left hand one. The writing is on the verse of the papyrus. The hand is very clear, and the writing, in dark black ink except for the rubrics which are in red, is well preserved. The text, starting on the second sheet, is written in 25 columns of 7 horizontal lines each, except for columns 15, 16, 17 and 18 which have only 6 lines each. The length of the lines varies between 15 and 18 cms approximately.

Palaeographically speaking, the papyrus must be dated to the Late Period, and more precisely to the period of the priests of Montu, prior to the XXVIth dynasty. This is confirmed by the name of the owner of the papyrus, Ankhefenkhonsu, frequent at that period.

Among all the Ankhefenkhonsu known to us from that time only one bears, among other titles, that of *it-ntr mry-ntr* "the god's father beloved of God" the only title mentioned on the present papyrus. That is Ankefenkhonsu son of Bissaawenmut, prophet of Montu and owner of two sarcophagi and one (or more ?) coffin in the Cairo Museum published by Moret, *Sarcophages*

de l'époque Bubastite à l'époque Saïte, Nos 41001 and 41001 bis, and GAUTHIER, *Cercueils anthropoïdes des prêtres de Montou,* No 41042. He[1] also owned another papyrus of the Cairo Museum which the author of this article is now preparing for publication.

There is no evidence left as to where the papyrus was found or how it reached the Museum, but it is most likely that it was found, if not in one of the sarcophagi above mentioned, at least somewhere near them, *i.e.* in the Deir el Bahri cachette.

The papyrus deals with chapters 128-134 of the Book of the Dead. Many passages are corrupt like many of the religious texts of that period. We give here a complete translation of the document, hoping that the variants presented will throw new lights on the general understanding of the text.

TRANSLATION

Chapter 128 **(middle)** :

(I, 1) Oxen and feathered fowl and every good thing for Osiris. Rise up 0 Osiris for I have struck for thee thy enemies (I, 2) and I have protected thee from them. I am Horus on that good day of thy might's beautiful glorious-appearance[1], (I, 3) when it exalted thee along with it on that day into thy divine council. O Osiris thy ka has come to thee (in order to be) (I, 4) with thee so that thou mayst rest in this thy name of "The - ka-is-content". He glorifies thee in this thy name of (I, 5) "Divine Spirit", and he adores thee in this thy name of "Hekau" (god-of-magic). He opens the way for thee in this thy name of "(I, 6) Opener-of-the-ways". O Osiris I have come to thee and I have set thy enemies under thee in every place (I, 7) so that thou mayst be justified in front of the Enneads and the divine bodies.

(1) For a study of the genealogy and titles of this man, the reader is kindly referred to the above mentioned publications.

O Osiris receive for thyself thy mace and thy sceptre, (II, 1) thy stairway being under thee, for thou hast conducted the *ʿbw*-offerings for the gods and lead the *ḥtpw*-offerings for those who are in (II, 2) their tombs. Mayst thou (now) give thy greatness to the gods whom thou hast created, being the great god, so that thou mayst be (II, 3) with them in their mummies for thou hast united thyself to all the gods[2], and so that thou mayst hear the voice of Maat [3](II, 4) on that day.

RECITATION OF WORDS : INVOCATION OF OFFERINGS TO THIS GOD ON THE FEAST OF WAG.

Chapter 129 = 100 :

(II, 5) **Book of Making a man Perfect and Causing Him To go Forth to** the bark of Rēʿ together with those who are in his following. (II, 6) **Recitation of Words :** Osiris. the god's father beloved of god, Ankhefenkhonsu ferries over the phoenix to the East and (II, 7) Osiris to Busiris[4]. He has opened the cave of Ḥapy and cleared (III, 1) the way of Aten. He has dragged Sokar on his sledge and he has strengthened the "Great One" (III, 2) in her time of action[5]. Osiris, the god's father beloved of god, Ankhefenkhonsu follows and adores Aten. (III, 3) He has joined (himself to) these who are in adoration for he is one of them. He has made himself second (III, 4) to Isis and third to Nephthys and he has strengthened their incantations. He has tied up (III, 5) the rope, and has repelled the enemy and crushed his movements. Then Rēʿ has stretched out his arms (III, 6) to him, and his mariners did not chase him. (When) Osiris, the god's father, beloved of god, Ankhefenkhonsu is powerful (III, 7) so is the wedjat, and vice-versa.

Recitation of words on this image which is in (the ritual) writing, (IV, 1) **Written Newly on a Blank Papyrus-Roll Purified With Grains of Frosting on Water of Myrrh** (IV, 2) given to a man and (placed on) his chest without letting him be touched. (Then) he will go down to the (IV, 3) bark of Rēʿ in the course of every day, and Thoth will take account of him as (he) comes and goes perfectly. (IV, 4) . Mayst thou draw it in a beautiful

shape, and the bark of Rē^{c} likewise. (IV, 5) As for the green frosting, one says concerning the green covering[7] :- it is the one with which is made (IV, 6) the top of the *ḏd*-column[8]. Osiris, the god's father, beloved of god, Ankhefenkhonsu is erecting the *ḏd*-column[9] and (IV, 7) he is fixing the *tit*-amulet[10] so that he may sail to any place he likes.

The Utterance Which (V, 1) Thoth, Rē^{c}, Tatenen and Hetep-Nebes-Rē^{c}[11] **Say is Gracious**[12]. Thoth Says : "I have reckoned (V, 2) his soul's going forth and coming down to the bark of Rē^{c}, while the corpse remained in its place".

Chapter 130 :

(V, 3) **Book for Revivifying** the soul for ever, and causing that it goes down to the bark of Rē^{c} to (V, 4) pass by the courtiers of the underworld. **To Be Made on The Day** of the birth of Osiris. **Recitation of Words By** (V, 5) Osiris, the god's father beloved of god, Ankhefenkhonsu : "The sky is opened, the earth is opened, (V, 6) the south is opened, the north is opened, the west is opened, the east is opened, the Upper Egyptian (V, 7) shrine is opened, the Lower Egyptian shrine is opened, the doors are opened and the gates are thrown opened (VI, 1) for Rē^{c} so that he may come forth from the horizon. The doors of the evening-bark are opened for him and (VI, 2) the gates of the day-bark are thrown open for him so that he may breathe Shu and create (VI, 3) Tefnut. Those who are in his following follow him".

This Osiris, god's father beloved of god, Ankhefenkhonsu (VI, 4) is one who follows Rē^{c} and who sizes his firmament, having equipped his sanctuary (VI, 5) like Ḥorus when he ascends towards him, and whose place is mysterious in the purity (VI, 6) of his chapel[13], messenger of the god and of what he likes. Osiris the god's father beloved of god (VI, 7) Ankhefenkhonsu rescues Maat and honours her images. (VII, 1) This Osiris, the god's father beloved of god, Ankhefenkhonsu pulled and bound fast the chapel[14].

(VII, 2) He abominates disorder, and (therefore) there is no turmoil(?) [15] near him. He will not be cut off Rē^{c} or (VII, 3) Osiris, and he will not be repelled by Him-who-acts-with-his-hands. This Osiris, the god's father beloved of god (VII, 4) Ankhefenkhonsu will not walk in the valley of darkness, he will not stumble in the lake of criminals, (VII, 5) he will not be in a bad moment[16], he will not fall into she-who-captures-(VII, 6) the-souls (?)[17] among those whose heads are cut off in the place of the slaughtering block of Soped[18].

Hail (VII, 7) to you mastyw-gods, the knife of the god is the mystery of the arms of (VIII, 1) Geb at dawn. If it is pleasant to him, he guides the old ones towards him (?) together with the younger ones (VIII, 2) at his proper time[19].

That is indeed in (his) religious mysteries. He has made the purification of (VIII, 3) millions, having opened the firmament and cleared cloudiness from it. (VIII, 4) Osiris, the god's father beloved of god Ankhefenkhonsu is in his place ; he has taken possession of his stick (VIII, 5) and he has received the nemes-kirchief near Rē^{c}, whose walk is great. The great one is shining at the (VIII, 6) place which he has prepared and the Enneads are warding off (evil) around his place[20]. They remove his pains, (VIII, 7) his sickness and his suffering. Osiris, the god's father beloved of god Ankhefenkhonsu removes (IX, 1) his pain and he pleases Rē^{c}. Osiris is opening the horizon of Rē^{c}. He has made a (IX, 2) bark (to) keep him safe[21] and he has rejoiced Thoth. He adores Rē^{c} who hears (him), (IX, 3) and throws obstacles against his enemies.

This Osiris, the god's father beloved of god Ankhefenkhonsu will not be boatless. (IX, 4) He will not be repelled from the horizon, for he is Rē^{c} and Osiris. He will not be (IX, 5) (left) boatless upon the great crossing by Him-whose-head-is-on-his-lap because his name (IX, 6) is in the mouth of Rē^{c} and in the belly of Osiris, the god's father beloved of god Ankhefenkhonsu, and his dignity (IX, 7) is in his mouth while he speaks to him[22],

and Osiris, the god's father beloved of god Ankhefenkhonsu (X, 1) hears his words: "Praises to thee Rē lord of the horizon, Osiris chief of the westerners, (X, 2) hail to thee for whom mankind purifies itself who controls the heaven at that great moment (X, 3) when the navigation treads over the enemies. Behold Osiris the god's father beloved of god Ankhefenkhonsu has come, and he has (X, 4) foretold Truth since the wonderful-one in the west has stopped the disorder (X, 5) of Apophis. He is Routy, Osiris, the god's father beloved of god Ankhefenkhonsu and he has announced (it). (X, 6) Behold ye who are at the head of the great seat, listen to him. Osiris (X, 7), the god's father beloved of god Ankhefenkhonsu is sent into the divine council and he overthrows Apophis (XI, 1) because of Rē every day. He will not reach him (because) he watches over him.

Osiris, the god's father beloved of god (XI, 2) Ankhefenkhonsu holds and receives the offerings. He provides Thoth (XI, 3) with what he has prepared and he causes that Maat prevails at the head of the great bark (XI, 4) carrying justification into the divine council. He establishes the millions and guides (XI, 5) the courtiers (of Rē). Osiris, the god's father beloved of god Ankhefenkhonsu allows them to cross (XI, 6) in the best of joy while the crew follows after his beauty. Maat (XI, 7) is exalted, and when she joins her master, praises are given to the lord of eternity.

(XII, 1) Osiris, the god's father beloved of god Ankhefenkhonsu has taken the rod and he has wiped out the sky (XII, 2) with it. Mankind gives him praises like those it gives when Him-who-is-no-longer-tired stands up. He exalts (XII, 3) Rē and (what) he has done. He has wiped away cloudiness and he has seen his beauty. He has established (XII, 4) his navigation so that he may move about and proceed to the bark in heaven and rise at dawn. (XII, 5) This Osiris, god's father beloved of god Ankhefenkhonsu is great in the midst of his eye (XII, 6) kneeling in the great bark of Khepri.

Osiris, the god's father beloved of god (XII, 7) Ankhefenkhonsu has come to existence, and what he has said has come to existence. He is --**Spell for Proceeding**

to heaven beside Rē[24] (XIII, 1) this one who pervades the western sky and for whom the starry-sky[25] of Shu stands up in jubilation. (XIII, 2) They take the front rope of Rē from his crew, and when Rē moves about, he sees Osiris (XIII, 3) and he decrees to Osiris, the god's father beloved of god Ankhefenkhonsu to be in peace, in peace. He will not be repelled by (XIII, 4) the blast of thy stricking power, and no opposition will come out of thy mouth against him. Osiris, the god's father beloved of god (XIII, 5) Ankhefenkhonsu will not walk on the road of aggressors because his abomination are the crocodiles, (XIII, 6) but they will not reach him.

Osiris the god's father beloved of god Ankhefenkhonsu descends to thy bark. (XIII, 7) He adorns thy seat for he has received thy dignity and he leads the way (of Rē) at (XIV, 1) dawn in order to repel this evil one who comes at the glow of (XIV, 2) thy boat (upon) that great desert-plateau. But Osiris, the god's father beloved of god Ankhefenkhonsu knows him and he will not (XIV, 3) reach thy boat because Osiris the god's father beloved of god Ankhefenkhonsu is in it. He is the one who provides offerings (XIV, 4) for the gods and sepulchral meals for the spirits[26].

Recitation of words on an Image (XIV, 5) **Of** this excellent spirit **Who is Placed in This Bark on Which Thou Willst Have Drawn A Night-Bark on** (XIV, 6) **Its Western Side, And a Day - Bark on Its Eastern Side.** There shall be made unto them offerings of bread and beer (XIV, 7) and incense and all kinds of burnt offerings on the day of the birth of Osiris. **As For Him to Whom** (XV, 1) **These are Made**, his soul, Will live forever, and he will not die again. It is a secret (XV, 2) of the underworld, a mysterious secret of the necropolis which was found in a hall of the palace under (XV, 3) the majesty of the king of Upper and Lower Egypt Semti justified, as being what was found in a cavern of the mountain as the doing of (XIV, 4) Ḥorus for his father Osiris-Wennefre.

Since Rē sees this spirit as an emanation of (XV, 5) himself, and (since) he sees him like his ennead (sees him)

great will be his fear and great the respect of him in the heart of men (XV, 6), gods, spirits and dead, and his soul will remain alive forever, (XVI, 1) it will not die again in the necropolis. He will (not) be left out on the day of judgement and he will be (XVI, 2) justified against his enemies. His offerings will be (prepared for him) on the altar of Rēᶜ in the course of every day.

Chapter 131 :

Spell for Going (XVI, 3) To heaven beside Rēᶜ. Recitation of Words by Osiris, the god's father beloved of god Ankhefenkhonsu: "I am that god Rēᶜ (XVI, 4) who shined on this night. As for any one who is in his train, he will live as a follower of (XVI, 5) Thoth, and he will make the appearance of Horus on this night"[27]. Osiris rejoices since he is one (XVI, 6) among them and his enemies are subdued from (among) the courtiers.

Osiris, the god's father beloved of god Ankhefenkhonsu (XVII, 1) is a follower of Rēᶜ, someone who has taken his heaven. He has come to thee, his father Rēᶜ, and he has travelled across (XVII, 2) Shu and called the 'Great One'. He has adorned this Hu[28] and reckoned with that 'Evil One' (XVII, 3) who is in the way of Rēᶜ. It was useful to him. When he reached this 'Old One' at the limits of the horizon, the 'Great (XVII, 4) One' repelled him[29] (i.e. : the Old One). (New) Osiris raises thy soul behind thee and thy soul is powerful through thy fear and through (thy) respect. (XVII, 5) This Osiris, the god's father beloved of god Ankhefenkhonsu is one who enjoins the instructions of Rēᶜ in heaven.

(XVII, 6) Hail to thee, great god in the eastern sky, thou goest down to the bark of Rēᶜ as a (XVIII, 1) divine falcon who has made decrees and who strikes with his sekhem sceptre and with his *iaret*-sceptre. (XVIII, 2) Osiris, the god's father beloved of god Ankhefenkhonsu comes down to thy bark and he sails in peace (XVIII, 3) to the Beautiful West. Atoum speaks to him. "Has anyone entered the Coiled-One ? It is millions (of coils) being (XVIII, 4) two millions in length on the western side of the lake of millions. All the enneads are detained in these on each side of it, (XVIII, 5) being divided in halves, and one says concerning the road which is in the middle of it, (dividing) each million from its second : "it is the wall of fire" (XVIII, 6), and they move about in the flame behind and in front (of it)[30].

Chapter 132 :

(XIX, 1, **BOOK FOR** making perfect the spirit in the heart of Rēᶜ, to be made during the first day of the month. Spell for Causing a man to go back (XIX, 2) to see his house. Recitation of Words by Osiris, the god's father beloved of god Ankhefenkhonsu ; "I am the lion which goes out with a bow. (XIX, 3) He has shot (an arrow) and he has ... ...[31] To him belongs the eye of Horus at this moment when Osiris, (XIX, 4) the god's father beloved of god Ankhefenkhonsu reaches the river-bank". Come in peace.

Chapter 133 .

BOOK FOR making perfect a spirit in the heart (XIX,5) of Rēᶜ. to be made on the first day of the month. Recitation of Words by Osiris, the god's father beloved of god Ankhefenkhonsu. "Rēᶜ appears (XIX,6) in the horizon. His ennead is behind him, when the god comes forth from the hidden place, and (XIX, 7) an excitement falls on the eastern horizon of heaven at the voice of Isis who straightens the way of Rēᶜ in front of the Great One.

(XX, 1) Raise thyself up, Rēᶜ, who is in his chapel, so that thou mayst absorb the winds, breathe the north wind, swallow the entrails, (XX 2) trap the day and kiss Maat, and so that thou mayst divide thy followers, having crossed by bark to the lower heaven. (XX, 3) The elders move (?)[32] at thy voice. (Then) thou settest thy bones in order, gatherest thy limbs, and turnest thy (XX, 4) face to the beautiful West. Thou comest there from renewed every day, for thou art, indeed, this statue of gold carrying what Aten (XX, 5) unites. The sky is full of animation

and when thou movest about, renewed every day, the inhabitants of the horizon rejoice and (XX. 6) joy is in thy cordage. When the gods who are in heaven see Osiris, the god's father beloved of god Ankhefenkhonsu, (XX, 7) they give praise to him like (they do to) Rē^c, for he is the Great One who searches out for the white crown of Rē^c (XXI, 1) and who counts her funerary meals.

This Osiris is a unique one, an accomplished one from this first generation of (XXI, 2) those who are in front of Rē^c, (bis).

Osiris, the god's father beloved of god Ankhefenkhonsu is sound upon earth and in the necropolis, (XXI,3) sound like Re^c every day. Osiris, the god's father beloved of god Ankhefenkhonsu (will not) hurry up, and he will never be tired (XXI, 4) in this land. How good it is when the eyes see and the ears hear Truth (bis). Osiris (XXI, 5) the god's father beloved of god Ankhefenkhonsu is one very rich in offerings. He is Rē^c whose race is splendid (XXI 6) in the following of Nun. He will not say what he has seen, nor will he repeat what he has heard in the house of (XXI, 7) He-whose-face-is-mysterious". Jubilation and joy for Osiris, the god's father beloved of god Ankhefenkhonsu, (XXII, 1) while the divine body of Rē^c crosses the Nun among those who satisfy the ka of the god with what he likes. (XXII, 2) Osiris, the god's father beloved of god Ankhefenkhonsu is a falcon great of manifestatiens.

Recitation of words on a (XXII 3) bark of 4 Cubits in Length, Painted With Green Dough and Having a Divine Council (Painted) on it A sky is Made Under it With Stars Cleansed and Purified With Natron and incense. BEHOLD, THOU SHALST MAKE an image of Rē^c drawn in yellow on (XXII, 5) a new bowl which will be placed in this bark. Then thou shalt make an image of (XXII, 6) this spirit whom thou wishest to be in this bark so that he may sail in the bark of Rē^c and so that Rē^c himself may see him (XXII,7) in it. Do not make (it) in front of anyone except thee thyself with (XXIII, 1) thy father. Beware greatly.

Making perfect a spirit in the heart of Rē^c, CAUSING HIM TO BE POWERFUL (XXIII, 2) NEAR the gods, so that the gods may see HIM LIKE ONE OF THEM, and so that WHEN THF DEAD see HIM (THEY FALL) (XXIII, 3) ON THEIR FACES, AND SO THAT HE MAY BE SEEN in the necropolis like the courier of Rē^c.

Chapter 134 :

(XXIII, 4) **Worship** of the (first) of the month; travelling by bark; PRAISING Rē^c the (first) day (XXIII, 5) of the month; travelling by bark. RECITATION OF WORDS BY OSIRIS, the god's father beloved of god Ankhefenkhonsu : (XXIII, 6) "Hail to thee Rē^c who is in the midst of his chapel, who rises a rising and shines a shining (XXIII, 7) who controls millions of men according to his desire, and who turns his face towards mankind. Khepri who is in (XXIV, 1) his bark and for whom Apophis is overthrown every day. It is the children of Geb (XXIV 2) who destroy ye, enemies of Osiris, assailants who break in upon (XXIV, 3) the bark of Rē^c and whose heads Horus has cut off to heaven (to be) as birds, (while) your buttocks (XXIV, 4) (are thrown) onto earth to become goats and to water as fish. All adversaries who would harm (XXIV 5) Osiris, the god's father beloved of god Ankhefenkhonsu, whether they descend from (XXIV, 6) heaven, come forth from earth, or come on water, or even advance towards (XXIV, 7) the stars, Thoth of the shell from the two shrines has beheaded them.

(XXV. 1) Be silent and be dumb to Osiris, the god's father beloved of god Ankhefenkhonsu, (XXV, 2) He is Rē^c, indeed this god great of slaughtering and big of respect (XXV, 3) who purifies himself in your blood, and who gets excited[34] at your gore. (XXV, 4) Assailants who want to destroy Osiris, the god's father beloved of god Ankhefenkhonsu (XXV, 5) in the bark of his father Rē^c, (XXV, 6) Osiris, the god's father beloved of god Ankhefenkhonsu is this Horus. His mother (XXV, 7) Isis gave him birth and Nephtys nursed him like they did to Horus.

The end ... ...

COMMENTARY

N.B.—The book of the Dead, having been translated, by and large, more than once, this text is probably already known to the readers interested in Egyptian religion. The most recent commented translation of the chapters presented here is that of BARGUET : *Le Livre des morts des Anciens Egyptiens*, pp. 137—138 ; 167 ; 171—176. In the present translation of chapters 130, ; 133—134, use was also made of PIANKOFF ; *The Shrines of Tut-Ankh-Amon*, and of BUDGE, *The Book of the Dead*, vols. II and III (2*nd* Ed. London 1923). The reader of this article is, therefore, kindly referred to these publications for most of the word to word explanatory notes, while the present commentary is reduced to an analysis of the text and to a study of the passages where a difference of interpretation in the rendering of the text is worth noticing. A few additional notes and remarks also complement the previous commentaries.

Chapter 128 :

This chapter serves as a general introduction for the papyrus and consists essentially of an invocation to resurrection after death.

1. "Thy might's beautiful glorious-appearance", or rather : "thy soul's beautiful glorious-appearance", as remarks BARGUET, *op. cit.*, is a metaphore for death and the parting of the soul from the body.

2. I, 7-II, 3. We assume here that the justification of the dead results (among other things) from the fulfilment of the offerings to the gods and deceased during his life, and that it is in his capacity of vindicated and deified being and not in this capacity of provider of offerings-as understands Barguet-that he should give his greatness to the other gods with whom he unites.

3. Maat. The impersonification of Truth and divine order. On this goddess see FRANKFORT, *Ancient Egyptian Religion*, pp. 49 ff.

Chapter 129 :

The main topic in this chapter is the equation of the justification of the dead with the consummation of the Wedjat-eye.

4. II, 6-7. Interesting parallel between Osiris and the phoenix. While the latter symbolises the soul of the deceased reviving with the sun god at his rising in the East, the former is probably thought of here as the dead ferried over for the funerary pilgrimage to Busiris, the original cult place of Osiris which had become a main centre for funerary religion in Ancient Egypt (see YOYOTE, in *Les Pélerinages*, p. 32). For the symbolism of the phoenix, its original meaning and later developments, see BONNET, *Reallexicon der Ägyptischen Religionsgeschichte, s.v. "Phönix"*.

5. II, 7-III, 7. This passage mentions the essential actions to which the dead took part to ensure resurrection. Like the opening of the caves of Ḥapy to allow the Innundation come forth, and the clearing of the ways of Aten to enable the sun god to reach the eastern horizon and rise in the morning, so too is the dragging of the bark of Sokar connected with vindication and resurrection. For this symbol as well as for the importance of the "Great one in her time of action" during the festival of Sokar, see GABALLA & KITCHEN in *Orientalia*, 38 (1969) p. 57-8 and 63 ff.

6. For the translation of m šs *m3ʿt* "perfectly", see. *Wb*, IV, 542, 16.

7. In BUDGE, *op.cit.*, II, p. 164,7, we read *ḥsb* instead of *ḥbs*. If that was the case, *ḥsb* would be "fracture" or "broken piece" (FAULKNER, *A Concise Dictionary of Middle Egyptian, p.* 178).

8. For *sit* "top of the *ḏd*-column", see FAULKNER, *op. cit.*, p. 262. This emendation is confirmed by the context.

9. On the erection of the *ḏd*-column, see BUDGE, *op. cit.*, chap. 155. For the origin and, meaning of this column as a symbol of Osiris, see BONNET, *op. cit.*, s.V. *Dedpfeiler*.

10. The *tit*-amulet is a symbol of Isis often mentioned with the *dd*-column. It is supposed to protect the dead wearing it and to open all the ways in front of him. See BUDGE, *op. cit.*, chap. 156. Thus, after the erection of the *dd*-column representing the resurrection of the dead and the fixing of the *tit*-amulet ensuring his protection and the opening of the ways in front of him, the deceased can sail to any place he likes as it is expressed here in line IV, 7.

11. Hetep - nebes - Rēᶜ "She-who-pleases-her-Lord-Rēᶜ" is an epithet that can be attributed to several goddesses. The one meant here isn't quite clear.

12. This sentence seems superfluous.

Chapter 130 :

This chapter is the longest but the most complex and confused in the papyrus. The dead is shown here either identified with Rēᶜ or adoring and serving him. He is promised not to suffer from any of the evils awaiting the dead in the underworld ; and before the final rubric he has access to the bark of Rēᶜ and is considered as his protector (lines XXIII, 7-XIV, 5).

13. VI, 4-6. This passage is obscure in all the versions of the Book of the dead. There may be here, nevertheless, an allusion to the Horus-king ascending to heaven after having equipped his tomb for his eternal life.

14. VII, 1. To which chapel it is referred to is not clear.

15. The connection between *ḥ3bs* "the starry-sky" (FAULKNER, *op. cit.*, p. 184) and *nšni* "disaster", "storm" (*ibid.*, p. 140) or "general disorder", is obscure. The translation "turmoil" for *ḥ3bs* has been chosen for want of a better one, on the bases that stars are moving, thus creating agitation in the sky. Perhaps connected with the *msḥtyw* of Seth ?

16. Translation doubtful.

17. An emendation of *bw* to *b3* in the text may be necessary. For this obscure passage, see also PIANKOFF, *op. cit*, p. 3, fnte 40 and *Barguet*, *op. cit.*, p. 171, fnte 3.

18, For the meaning of the name of Soped "sharp", and his connection with slaughtering and massacres see BONNET, *op. cit.*, *s.v. Sopdu.*

19. VII, 7-VIII, 2 Is there a connection between the knife of the god and the slaughtering block of Soped? Or have we rather, here, a metaphor for death and burial in the arms of Geb, the earth-g d ? The next sentence would, in this case, allude to death striking young or old according to its desire and at the time it chooses, regardless of any other circumstances.

20. VIII, 5-6 The translation proposed here is after the text of LEPSIUS, *Todtenbuch*, pl. LIII, 10 which gives the most intelligible version of this passage Here the "Great one" obviously refers to Rēᶜ.

21. Play of words on *swd3* ; "to keep safe" and *swd3* : "to go" (FAULKNER, *op cit*, p 218), here, away from the enemy !

22. "Him" refers to the ferry man.

23. For the translation of *bi3w* "the wonderful one" see *Wb*, 1, 441, 12-13. Here probably an epithet of the Osiris-dead.

24. XII, 7. The rubric is wrongly inserted here. The spell continues.

25. The same word as in VII, 2, but used in a completely different centext. "The starry-sky of Shu" may refer, here, to the souls of the dead embodied in the stars and rejoicing at the passage of Osiris.

26. XIII, 3-XIV, 4. This passage is an invocation addressed directly to Rēᶜ as indicated by the suffixes in the second person singular clearly referring to him.

Chapters 131-134 :

In these chapters the dead is identified with Rēᶜ and the text deals with a series of the dead's happenings in the other world.

72. Rēᶜ shines at night when he is identified with Horus the Elder whose two eyes are the sun and the moon, (see BONNET, *op. cit.*, pp. 309 ff.). But as the moon, he falls under the supremacy of Thoth, and "lives in his following", and "makes the appearance of H rus" (this time as moon god). For the connection of Thoth with Horus the Elder as the moon, see BONNET, *op. cit.*, pp. 310 & 807.

28. The Hu in question here is the counterpart of Sia, appearing on the solar bark as a protector of Rēᶜ (see BONNET, *op. cit.*, *s.v.* Hu and references given there).

29. XVII, 3-4. This passage presents an interesting variant to the text translated by Barguet as "Je l'ai écarté, j'ai pris possession de la Grande" (*op. cit.*, p. 173, with reference to the text). In the present text, "the Great One" is probably the uraeus of the crown of kings and gods as suggested by the crown determinative, rather than the goddess Nut as understands Barguet. This interpretation is supported by the role of protectress attributed in our variant to the *wrrt* since she is said, in lines XVII, 3-4, to repel the "Old One", presumably an epithet of *nbd* (line XVII, 2) itself an epithet of Apophis (see *Wb.*, II, 247, 6).

30. XVIII, 3-6. This passage is extremely obscure in all the known versions of the Book of the dead. From the present version nevertheless, and with the help of that of Lepsius, one can get a little more sense : The enneads moving in circles of flame around a road of fire. Compare also with CT. spell 759. For illustrations of this scenes see maps at the end of DE BUCK, CT., vol. XII.

31. The text is obscure.

32. Faulty text. The translation is based on BUDGE, *op. cit.*, II, p. 174.

33. "The house of He-whose-face-is-mysterious", is given in both this version and that of Lepsius. Probably a name of a place in the underworld.

34. For the meaning of this word "to become excited", see FAULKNER *op. cit.*, p. 41.

Pap. Cairo Museum S R. 640. I,1 – II,7 : 1

a. sic for ỉ33t 'sceptre', Wb. I, 27, 10

b : sic for

Pap. Cairo Museum S.R. 640, III,1 - IV,7. 2

(III,1)
(III,2)
(III,3)
(III,4)
(III,5)
(III,6)
(III,7)
(IV,1)
(IV,2)
(IV,3)
(IV,4)
(IV,5)
(IV,6)
(IV,7)

a hieratic [sign] cp. below IV,5. b the sign is smudged c sic for ḥbt, cf below V,

d emend to [signs] e probably for ḏ't 'top of the dd-column. JEA, 37, 29

Pap. Cairo Museum - S.R. 640. V,1 - VII,2. 3

(V,1)
(V,2)
(V,3)
(V,4)
(V,5)
(V,6)
(V,7)
(VI,1)
(VI,2)
(VI,3)
(VI,4)
(VI,5)
(VI,6)
(VI,7)
(VII,1)
(VII,2)

Pap. Cairo Museum S R 640, VII,3 – IX,2 4

(VII,3)
(VII,4)
(VII,5)
(VII,6)
(VII,7)
(VIII,1)
(VIII,2)
(VIII,3)
(VIII,4)
(VIII,5)
(VIII,6)
(VIII,7)
(IX,1)
(IX,2)

a hieratic [hieroglyph], probably [hieroglyph], see also below IX,5 a .. .b the passage is not clear, for a more intelligible version see Lepsius, Todtenbuch. pl. LIII, 10 reading: . . . [hieroglyphs] . . .

Pap. Cairo Museum S. R. 640, IX,3 – XI,2. 5

(IX,3)
(IX,4)
(IX,5)
(IX,6)
(IX,7)
(X,1)
(X,2)
(X,3)
(X,4)
(X,5)
(X,6)
(X,7)
(XI,1)
(XI,2)

a: emend to [hieroglyphs], cf. above VII,3. b: see above VIII,5.
c: instead of [hieroglyphs] of Budge, The Book of the Dead, II, p. 167.
d: [hieroglyph] superfluous e: [hieroglyph] sic, for [hieroglyph] f: the [hieroglyph] determinative has been omitted.

Pap. Cairo Museum S R 660. XI.3 - XIII.2. 6

(XI,3) … (XIII,2) [hieroglyphic text]

a: [hieroglyph] is written after [hieroglyph] in the title [hieroglyph] only in this instance in the whole papyrus

b....c: Faulty insertion of a new rubric; the sentence just starting with [hieroglyph] continues on XIII,1.

Pap. Cairo Museum S R 660. XIII.3 - XV.1. 7

(XIII,3) … (XV,1) [hieroglyphic text]

z: ◦ for a full stop

y: [hieroglyph] for [hieroglyph]

a: for [hieroglyph] cf. above IX,4 and VII,3.

b: emend [hieroglyphs]

c: emend [hieroglyphs].

d: for [hieroglyphs]

e: sic for [hieroglyph].

f: should be [hieroglyphs]

g: [hieroglyph] omitted after [hieroglyph]

h: sic for [hieroglyphs]

Pap. Cairo Museum S. R. 640, XV, 2 – XVII, 3. 8

a: is missing under

b: emend

c: emend

Pap. Cairo Museum S. R. 640, XVII, 4 – XIX, 4. 9

a sic for

b a missing after *šfjt*

c: sic for

d emend

e emend

f.... g: this passage is obscure in all the versions of the Book of the dead.

Pap. Cairo Museum S R 640, XIX, 5 – XXI, 4. 10

a: hieratic, a mistake for ; b..... c: unintelligible. Emend like Budge, op. cit. I, p 174, 5. d emend e: insert before
f. Other versions have an inserted before and , but the meaning without is better.

Pap. Cairo Museum S R 640, XXI, 5 – XXIII, 4 11

a: The last sign is faded _ the word probably stands for 'gifts' (Faulkner, A Concise Dictionary of Middle Egyptian, p. 11) or 'offerings'. b a stroke | is expected after c. one should insert after to have w-b-ti' & twr-ti'.

Pap Cairo Museum S. R 660. XXIII, 5 - XXV, 7 12

a. the strokes of the plural are missing after
b. hieratic
c. above O. space-filler, or beginning of a sign?

NEUE FORMEN DER KOOPERATIN ZWISCHEN ÄGYPTOLOGIE UND NATURWISSENSCHAFT

(Neue Forschungen an den Giza-Pyramiden)

VON

Dr. ALI HASSAN

Die Pyramiden von Giza, für die Moderne gigantische Ausdrucksform eines der geschlossensten Staatswesen der Antike, der Zeit der Pharaonenherrscher des Altes Reiches (2665-2135 v. Chr), sind bis heute in der Forschung aktuell geblieben und bilden einen Zentralisationspunkt für die verschiedenesten Fragestellungen. Bisher sind es in wesentlichen historisch ausgerichtete Wissenschaften wie die Ägyptologie oder die Bauforschung, die die Pyramiden von Giza als klassisch betrachten (für den Ägyptologen und Historiker der manifeste Höhepunkt einer geschichtlichen und Kulturellen Entwicklung, für den Bauforscher die feinste geometrische Abstraktion einer Idee), ohne daβ die entgültigen Antworten bisher gefunden worden sind.

Das vorliegende Papier soll nicht die Zusammenarbeit der Archäologen, Ägyptologen und Architekten herausstellen, die für solch Komplexe Bauerwerke wie die Pyramiden, die ja auch aus anderen Teilen, wie Taltempel, Aufweg, Totentempel, Magazinräume usw bestanden haben nötig ist, sondern zeigen, wie von anderer Seite her, von den Naturwissenschaften, lösungen für die zahlreichen Probleme der Pyramiden kommen können. Die neuen Versuche, mit technischen Hilfsmitteln einen Zugang zu den Pyramiden zu gewinnen sind, auch wenn oftmals ein spektaklarer Erfolg ausbleiben sollte, gerade durch die andersartigen Fragestellungen fruchtbar. Die Naturwissenschaft ist eher bereit, den Experimentalcharakter des Projektes zu akzeptieren, doch definiert sie oftmals unerbittlicher als der Historiker die Problemstellung.

Die Einführung einer neuen naturwissenschaftlichen Methode ist, bei einer erfreulich zunehmenden Aufgeschlossenheit der historisch ausgerichteten Forschung, ein Impuls für weitere Untersuchungen. Gerade eine Rückbesinnung auf simple Fakten, etwa auf mathematisch berechenbare Aufwendungen an Arbeitkraft und Material für die Pyramiden wie sie ein Naturwissenschaftler leicht als Basis für seine Forschungen anstellt, kann auch für den historisch ausgerichteten Wissenschaftler stimulierend wirken.

Als Beispiel seien ein paar Daten über die Menge der verbauten Steinblöcke erwähnt. Das Faktum einer bloßen Zahl wird dem Historiker, der vielfach nicht in der lage sein wird, die Dimensionen einer solchen Zahl abzuschätzen, wenig aussagen, er wird sie aber gern in die historische Entwicklung mit einbeziehen.

Längst ist bekannt, daß die aus der historischen Ferne so uniform scheinenden materiellen Grundlagen der Pyramidenzeit Schwankungen und Revolutionen unterworfen sind. So ist ein Zahlengerüst über das Bauvolumen der einzelnen Herrscher mehrfach für den Politischen und wirtschaftlichen Zustand des Staates verwertet worden. Die 4. Dyn. (ca 2600-2450 v. Chr) benötigte in ca. 150 Jahren mehr als 8,5 Millionen Kubikmeter Stein. Die 5. Dyn. begann mit der Errichtung von 8 Pyramiden mit einem totalen Volumen von etwa 1 Million Kubikmeter. Ihre 9 Herrscher umfassen ebenfalls ca 150 Jahre. Die 6. Dyn. mit ca 160 Jahren (ca 2290-2135 v. Chr) verbaute nur noch etwa eine halbe Million Kubikmeter Steine.

So scheinen für einen Vergleich die Zahlen gut geeignet, ein Cheops benötigte für die große Gizapyramide in der 4. Dyn. in ca 25. Jahren Regierungszeit (2545-2520 v. Chr) mehr als 2,6 millionen Kubikmeter Stein, ein Pepi II. in der 6. Dynastie in 94 Jahren Regierungszatt nur noch 105000 Kubikmeter Steine und Lehmziegel.

Und doch sind diese Zahlenangaben, die in den historischen Rahmen zu passen scheinen, im eigentlichen Sinne falsch, sie sind nicht exakt genug. Der mathematisch geschulte

Naturwissenschaftler wird versuchen genauere Ergebnisse zu erhalten, wird sich nicht auf die meist auf Schätzungen und einfacheren geometrischen Berechungen früherer Archäologen und Bauforscher basierenden Resultate verlassen wollen.

Es sei nur erwähnt, daß einige der Pyramiden über einen Felskern aufgebaut sind. Der Naturwissenschaftler wird versuchen, den Umgang dieses Felsmassives zu bestimmen, wird ihn von der aus der geometrischen Form gewonnenen Kubikmeterzahl abzuziehen versuchen. Er wird neue Methoden und Techniken einsetzen müssen, sei es Widerstandsmessung oder Strahlentechnik, um den Umriss des Felskernes herauszuarbeiten um die exakteste zahl für die spätere historische Auswertung zu gewinnen. Er betreibet damit eigentliche Grundlagenforschung.

Ihn wird ebenso wie den Historiker die Aufgabe an der Entschlüsselung der Pyramiden mitzuarbeiten reizen, auch er wird sich an der Deutung beteiligen.

Die Tatsache des enormen Umfangs des Bauprogrammes in der 4-6 Dyn., die Totalität mit der die Organisation des Staates für die Gewinnung und Errichtung solch ungeheurer Steingebirge in begrenzter Zeitspanne arbeitete, ist jüngst wieder einen von den Naturwissenschaften herkommenden Forscher, wir meinen die Gedanken des Physikers K. Mendelssohn in seinem Buch "The Riddle of the Pyramids" aufgefallen.

Auch wenn seine Schlußfolgerungen, wie etwa die mit Beginn des Pyramidenbaus gegebene Notwendigkeit der Beibehaltung des Bauprogrammes zur Aufrechterhaltung der wirschaftlichen Ordnung, einseitig und überspitzt scheinen, so ist es doch, kein Zufall, daß gerade ein Naturwissenschaftler in dem Bau der Pyramiden eine Zwingendere logik sucht als die meisten Historiker. In den vergangenen Jahrzehnten sind verschiedene neuartige wissenschaftliche Techniken zum Nutzen der Archäologie eingeführt worden. Als ein allen bekanntes Beispiel sei die Luftbildphotographie erwähnt.

Nach ersten Versuchen mit konventioneller Schwarz-Weiß Photographie benützte man bald auch erfolgreich den Infrarot-Farbfilm und die Falsch-farbenphotographie. Unter der Erde liegende Befunde wie Mauern, Straßen oder Gräbern konnten rasch aufgenommen und schon aus der Luft vermessen werden.

Man lernte die Infrarottechnik zu bestimmtenTageszeiten einzusetzen, so bei beginnender Nacht, wenn die feinen Temperaturunterschiede bei der Abkühlung unterschiedliche Strukturen unter der Erde heraustreten lassen. Neueren Datum ist auch der Einsatz eines Magnetometers. Sorgfältige präzise Messungen des Magnetfeldes des Erdbodens, wobei nach einem Netzmuster vorgegangen wird, machten es möglich, tief unter der Erde liegende Objekte wie Statuen und Mauern zu lokalisieren oder nicht zur geologischen Landschaft gehörendes Material wie etwa importierten Stein in einer systematischen Untersuchung im der Fläche zu bestimmen.

Widerstandsmessungen auf größerer Fläche konnten in manchen Fällen licht auf unter der Oberfläche liegende Strukturen werfen nach Auswertung der Linien der Kraftfelder, die entstanden, nachdem ein ständig wechselnder Impuls in Niederfrequenzstärke zwischen zwei Elktroden im Erdboden hin- und herging. Diese und ähnliche Methoden, ständig in geophysikalischer Erschließung von Öl-Wasser-und Mineralvorkommen verwendet, haben nun mit der Zeit Anklang gefunden und sind für viele Archäol gen mehr, oder weniger schon Routinevorgänge geworden. Es gibt jedoch auch Zeiten, wenn grundlegende wissenschaftliche Durchbrüche erzieht werden können indem man sowohl Probleme der archaeologischen Aufspürung wie auch die Fundamentalen der Naturwissenschaft bekannten physikalischen Effekte einfallsreich durchdenkt und verbindet.

Ein hier vorgestellter Fall ist das ingeniöse Experiment mit kosmischer Strahlung, auch genannt "cosmic ray project", das in jüngster Zeit von dem Nobelpreistrager Professor Luis Alvarez vor der Chefrenpyramide bei Giza zuende geführt wurde(1).

1 — S. Taf. 1

Obwohl von Hause aus kein Ägyptologe, hatte Prof. Alvarez vermutet daß ohne weiteres noch unbekannte Kammern über der bekannten Grabkammer, der sogenannten "Belzoni-Kammer", die in Felsbett beinahe im Zentrum der Pyramidenbasis liegt(2), aufgefunden werden könnten.

Chefren's Vater Cheops hatte verschiedene überflüssig erscheinende Kammern in der "Ersten Pyramide" anlegen lassen, und die Pharaonen der 4. Dyn, waren wahrscheinlich nicht unempfindlich gegen die Möglichkeiten der Grabräuber in ihre Pyramiden einzudringen und sie auszuplündern, so daß mit der Möglichkeit zu rechnen ist, daß die eigentliche versteckte Grabkammer noch nicht entdeckt wurde.

Professor Alvarez' Experiment begann 1967 und setzte massive" Funkenkammern ein (spark chambers), um den Fluß der kosmischen Strahlung", der von außen in die Belzoni-Kammer geschickt wurde, aufzuzeichenen. Dabei wurde die Anzahl der Strahlungspartikel, bestimmt und der Winkel ihres Eintreffen festgelegt.

Bei einem sorgfältigen Inbetrachtziehen der geometrischen Form konnte so Prof. Alvarz zeigen, daß es höchst unwahrscheinlich ist, daß unbekannte Kammern im Kernteil der Pyramide über der Belzoni Kammer vorhanden sind. Beweise dafür, daß das Experiment voll wirksam war, war die erfolgreiche Entdeckung einerseits der überiggebliebenen Verkleidung der Chefren pyramide unter der Erdoberfläche aus Tura — Kalkstein wie auch die Beobachtung des "Schattens" der Cheopspyramide, als das Gerät horizontal nach Nordosten gerichtet wurde, so als ob durch eine Ecke der Belzoni-Kammer in die Richtung der Cheopspyramide geschaut werden könnte.

Die wichtigsten Grenzen für das Experiment bildeten die fehlende Möglichkeit der Ausrüstung damit unter die Pyramide "sehen" zu können und die relative Unempfindlichkeit gegen irgendwelche Kammern nahe bei der

2 - S. Taf. 2

Belzoni-Kammer selbst. Vom Standpunkt des sich mit Strahlenforschung befassenden Physikers war dieses erste Experiment außerordentlich erfolgreich und die Archäologie Profitierte ebenso von der Anwendung der vollstandig neuen Technik mit dem Resultat, daß der zuverlässige Schluß möglich ist, daß der obere Teil der Pyramide in der Tat keine zusätzlichen Kammern enthlät. Eine zweite Gruppe amerikanischer Wissenschaftler vom Stanford Research Institute, ebenfalls keine Archäologien, entwickelte und testete eine völlig verschiedene Art von Gerät für Fernwellen, um es im der Archäologie einzusetzen. Kurze Ausstrahlungen von Hochfrequenzenergie gingen davon aus, um die unter der Oberfläche liegenden Strukturen zu erfassen, ähnlich einem sehr kurz reichenden Radar. Die Unterschiede dazu liegen in der Tatsache, daß die Radioenergie eigentlich in den Fels oder die Erde eingelassen wird und nicht durch die Luft geht und daß die ausgesandte Wellenlänge mehr als hundertfach kürzer als die im gewöhnlichen Radarsystem verwendete ist. Die Entwicklung dieses neuen "underground" elektromagenetischen Senders erforderte annähernd 2 Jahre und zahllose Teste im Gelände waren nötig um zu beweisen, daß die Ausrütung wirklich geeignet war versteckte Kammern und Höhlungen in Passender Umgebung von der Oberflache aus zu entdecken.

Gegen Ende 1974 schloß sich das Team des SRI mit einer ägyptischen wissenschaftlichen Mannschaft der Ain Shams-Universität und dem ägyptischen "Department of Antiquities" zusammen, um unter Einsatz des neuen Geräts eine Reihe von Versuchen, beginnend mit der Chefrenpyramide, zu starten. Die leichtgewichtigen tragbaren Einheiten waren potentiell geeignet um Höhlungen von Kammern zu Lokalisieren:

(*a*) In den Pyramiden *b*) unter den Pyramiden *c*) für die Pyramide laufenden Bodenbeläge (aus Stein), wo z. B. Gruben für die Boote öfters gefunden werden. *d*) unter dem Wüstensand, nützlich bei archäologischen Plätzen wie etwa Saqqara.

Die Ausrüstung für die Versuch mit Wellen bestand aus einer Sendeeinheit, die die Hochfrequenzwellen erzeugt(3), weiterleitenden und empfangenden Antennen aus einem mit Metall beschlagenen Schirm, und einem Empfänger-system mit angschlossenen Oszilloskop, wo die erhaltenen Wellenkurven beobachtet und photographiert wurden. Die eigentlich Aufgabe des Empfängerssystems ist, die Laufzeit der entsandten Wellen zu messen.

Die erste Spur auf dem Oszilloskop beginnt, wenn die gesendete Welle losgeschicht wird, der Schirm kann für die Zeitspanne, die begrenzt ist durch die beim studieren Objekt maximale Entfernung im Felsen, abgelesen werden. (Die Geschwindigkeit elektromagnetischer Wellen im Fels ist generell etwa ein Drittel der Lichtgeschwindigkeit in der Luft oder im Weltraum.

Die elektromagnetischen Wellenexperimente in Giza waren weithin unergiebig, was die Lokalisierung versteckter Kammern oder Bootsgruben anbetrifft, wegen den unerwartet hohen Verdünnungs-und Ablenkungsraten der Kalksteine des Gizagebietes.

Dieser hohe Schwund kam für die Forscher überraschend, da im vergangenen Jahre zwei von drei Proben des Giza-Kalksteins im Laboratorium weit weniger hohe Verlustraten ergeben hatten. Unglücklicherweise sind unter den Gesteinsarten die Kalksteine weniger vorausberechenbar als andere Arten soweit es die Verluste an Hochfrequenzenergie anbetrifft, so daß definitive Antworten über die elektromagnetischen Wellenexperimente bis jetzt nicht gegeben werden können. Im Gegesatz zu der Mehrzahl der Pyramiden und ihrem Felsbett aus Kalkstein darunter, die für Hochfrequenzenergie zu hohe Verluste haben um mehr als einige Meter in den Fels ein dringen zu können, weisen die Sande von Saqqara ziemlich nieder Verdünnugsraten auf, und die Entdeckung von vergrabenen Artefakten scheint in diesem Fall leichter und wird, wenn das Unternehmen im nächsten Jahr wiederaufgenommen wird, dort weiter verfolgt werden.

Zur gegenwärtigen Zeit ist die SRI Gruppe dabei einen den gleichen archäologischen Zielen dienenden Versuch zu entwerfen und zu testen. Es ist oftmals wahr, daß,

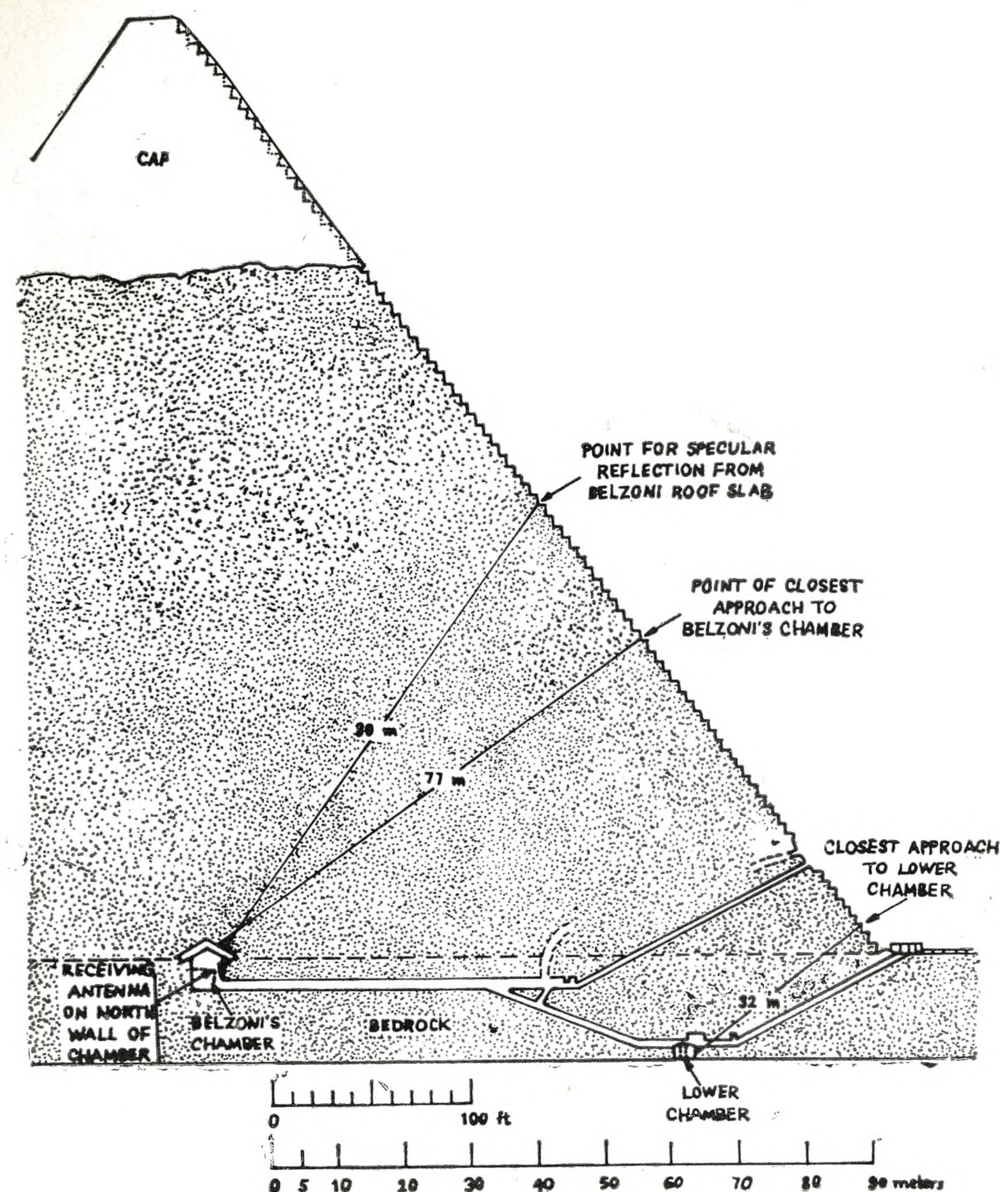
3-S .Taf. 3.

wo eine Technik infolge der durch die Natur auflegten Grenzen nicht erfolgreich ist, sie durch eine andere Methode ergänzt werden kann.

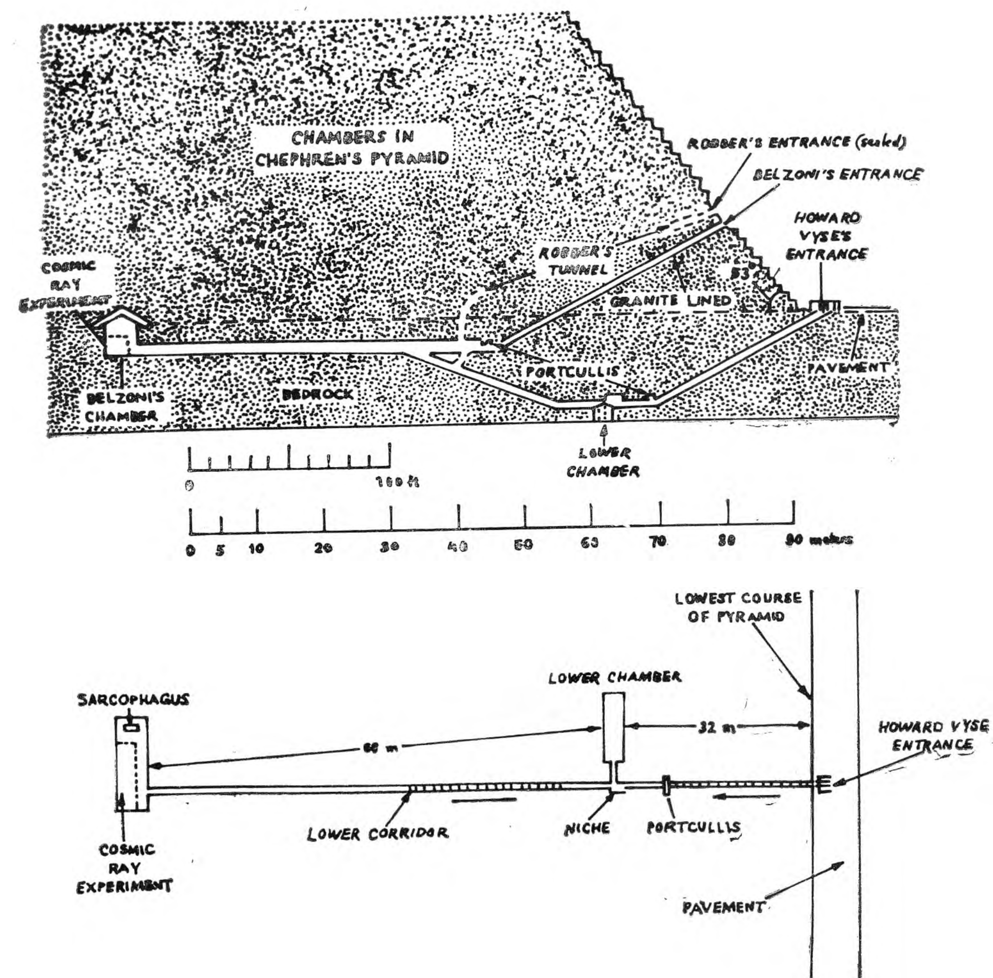
Der Sender soll kurze Stöße akustischer Energie, in den Felsen eingelassen, oder ein Niederfrequenzsignal, wahrscheinlich im Frequenzbereich von 1000 bis 5000 Hertz, aussenden.

1. **J.H. Cole**, Determination on the Exact Size and Orientation of the great Pyramid of Giza, Cairo 1925.
2. **A. Herbert**, The great Pyramid, its Divine Message, London 1932.
3. **Reich, Wilhem**, "Cosmic Superimposition" The Wilhem Reich Foundation Orgenon, Rangeleg, Maine, 1951.
4. **Badawy, A. History of Egyptian Architecture**, Vols. I-III. Cairo, Berkeley and Los Angelos 1954-68.
5. **L. Sprague de Campe**, How the Pyramids were Built, Fate, Vol. 15 No. 12, Dec., 1962
6. **J. Coulomb and G. Jobert**, The Physical constitution of the Earth Oliver and Boyd, Edinburgh, 1963
7. **Tompkins, Peter**, "Secrets of the great Pyramid". Harper and Row, New York 1971.

   K. Mendelssohn, A Scientist looks at the Pyramids in : American Scientist, Vol. 59, No. 2 March – April 1971, pp. 210-220.
8. **R.C. Archibald**, "The Pyramids and Cosmic Energy. Aleph Enterprises, Pola Alte, Col., 1972.
9. **F.G. Patrick**, The Pyramid and its Relationship to Biocosmic Energy, 1972.
10. **Amkraut, Joel.**, "Pyramid Power", Sparceview Magazine, Jan. Feb., 1973
11. **K. Mandelssohn**, The Riddle of the Pyramids. Cambridge, 1974.
12. **L.T. Dolphin**, An underground Electromagnetic Sounder Experiment, in : American geophysical Union, Vol. 39, No. 1, February, 1974.
13. **L.U. Alvares**, Search for Hidden chambers in the Pyramids, Science Vol. 167 p. 832–839 (February 1970).
14. **A. Fakhry**, The Pyramids, Univ. of Chicago Press, Chicago 1961.
15. **L.W. Alwarez**, Lawrence Radiation laboratory physics. Note 544 (1 March 1965).
16. **E. Edwards**, The Pyramids of Egypt, London 1947, Rev. 1961.
17. **L.T. A. Dolphin, A. Hassan and others**, Electromagnetic Sounder Experiments at the Pyramids of Giza, March 1975 (Joint A.R.E.-U.S.A. Research.

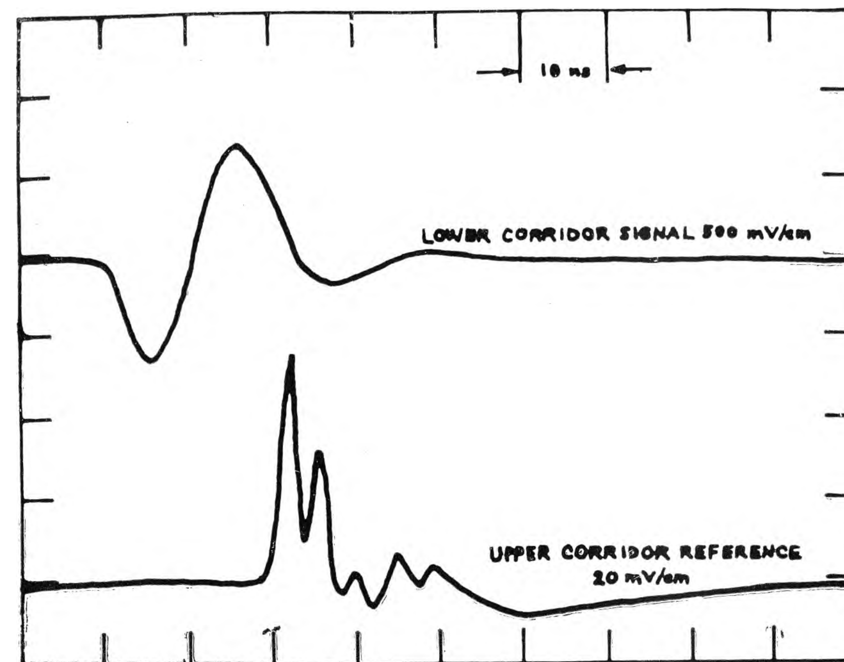


Geometry of propagation through north face of Chephren's Pyramid,
S. Dolphin, Nr. 17

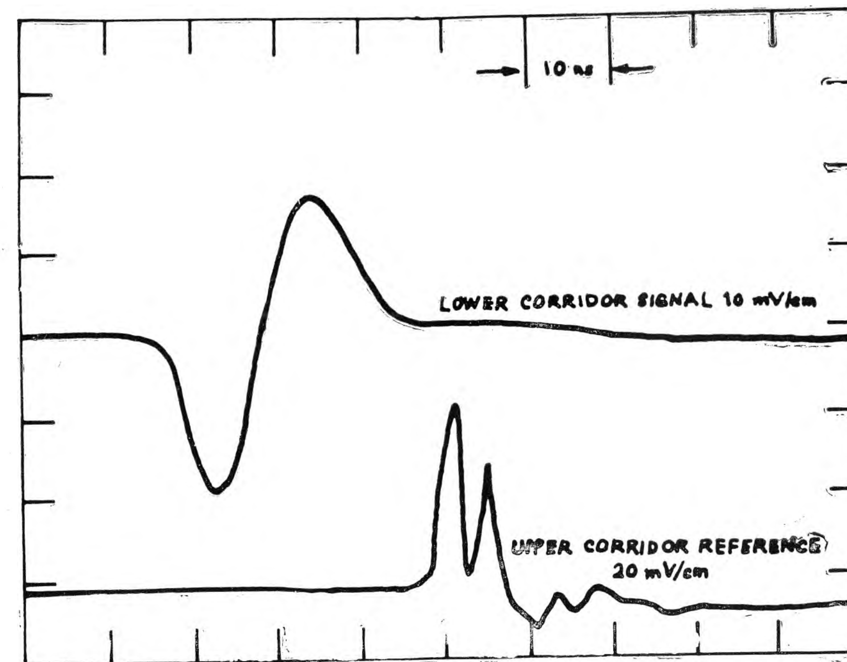


Detailed geometry of the interior of Chephren's pyramid.

(S. Dolphin, Nr. 17).



a). Transmitter and receiver at 14-foot positions



b). Transmitter and receiver at 30-foot positions
Oscilloscope A-scope display of 50-MHZ data.
(S. Dolphin, Nr. 17).

TWO JUBILEE TEXTS FROM THE TEMPLE OF EDFU[1]

BY
MOHIY E. A. E. IBRAHIM

These are the two jubilee texts[2] which deal with the proclamation of the god's decree to the gods and the goddesses of Egypt, as well as to the whole population, symbolised by the presence of the *ḥnmmt*, the *rḫyt*, and the *pꜥt*.

These two scenes follow each other directly on the interior of the east enclosure wall; the first being concerned with the proclamation of the decree to the gods, and the second with the proclamation to the people.

The first scene [3].

The king is led into the presence of the gods by Wepwawet and Harsomtus, while *iwn-mwt.f* stands before them and recites the proclamation to the waiting divinities. The gods are represented on the right of the scene, seated in two rows of seven. In the upper row sit, facing left, Monthu, Atum shu, Tefnut, Geb, Nut, and Osiris; and below them is Isis, Horus who resides in Behdet, Nephthys, Horus the Behdetite, Hathor, Tenenit and finally *iwnyt*.

The title of the scene seems to be the short vertical column in front of Wepwawet and reads :[4] "Giving life to the nostrils of the Lord of the [Two] Lands". No offering formula is given, but here we put the complete text :

The king [hieroglyphs]

nsw bit ( ) *sꜣ Rꜥ* (Ptolemy *ꜥnḫ ḏt mri Ptḥ*) (*E.* VI, 289, 13)

1. In the footnotes *E.* is employed as an abbreviation of Rochemonteix—Chassinat, *Le Temple d'Edfou*.
2. These texts are on the interior of the east enclosure wall, see *E.* VI, 289, 13 — 292, 4 = X, pls. 152 — 153 = XIV, pl. 597 ; *E.* VI, 292, 6 — 293, 13 = X, pl. 153 = XIV, pls. 598 — 599. See below, pl. I.
3. *E.* VI, 289, 13 — 292, 4 = X, pls. 152 — 153 = XIV, pl. 597.
4. *E.* VI, 289, 16.

"The king of Upper and Lower Egypt, ( ) Son of Re. (Ptolemy, may he live for ever, beloved of Ptah)

Nekhbet, the vulture, hovers above him

nḫbt ḥdt nḫn (*E.* VI, 289, 14)

"Nekhbet, the white one of Nekhen"

Wepwawet 1 (sic) 2 3 4 5

ḏd mdw in wp-wȝwt šmᶜ sḫm tȝwy sḫr sbyw ḫnty st wnp wp-wȝwt ḏsr smȝty rdi ᶜnḫ r ḫnmty nb tȝ [wy] wp.i wȝwt.k ḏsr.i smyt.k sḥr.i dȝjw dȝjt m r-wȝwt.k (*E.* VI, 289, 15–17).

"Words to be said by Wepwawet of Upper Egypt, the controller of the Two Lands, who overthrows the rebels in the place of piercing, who opens the way(s), who clears the road (s). Giving life to the nostrils of the lord of the [Two] Lands. I open thy ways. I clear thy roads, I drive the enemy, male and female[1], far from thy path".

Harsomtus 6 7 8 9

ḏd mdw in Ḥr-smȝ-tȝwy pȝ ḫrd sȝ Ḥwt-Ḥr ᶜȝ wr tpy n Ḥr-Bḥdty nṯr ᶜȝ nb pt sf šps pr m nwn nb Bḥdt ḥry srḫ

(*E.* VI, 290, 1 - 2).

" Words to be said by Harsomtus, the youth, son of Hathor, the very great, the first born of Horus the Behdetite, the great god, lord of heaven, the noble youth, who came forth from Nwn (the primeval water), lord of Behdet, who is upon the Serekh".

1. For *dȝjw dȝjt* "enemy, male and female" see *Wb.* V, 533 (3).

The iwn-mwt. f-Priest 10 11 12 13 14

ḏd mdw in iwn-mwt. f ᶜbw pr-wr n psḏt ᶜȝt imyw Wṯst-Ḥr rdi wḏwt n Rᶜ-Ḥr-ȝḫty-itm nb tȝwy iwny iȝwt. f st. f nst. f nsyt. f n sȝ. f mri. f nsw bit ( ) *sȝ Rᶜ* (*Ptolemy ᶜnḫ ḏt mri Ptḥ*) *wḏ. f n. f tȝwy ḫȝswt nb dmḏ ḫr ṯbwy. f* (*E.* VI, 290, 3–6).

"Words to be said by *iwn-mwt. f*[1] The purifier of the *pr-wr* to the great Ennead that is in *Wṯst-Ḥr*, who proclaims the decree of *Rᶜ - Ḥr-ȝḫty-itm*[2], lord of the Two Lands, the Heliopolitan, i.e. 'his kingly office, his seat, his throne, his Kingship' shall be for his beloved son, King of Upper and Lower Egypt ( ) Son of Re (Ptolemy, may he live for ever, beloved of Ptah). He has bequethed to him the Two Lands, all foreign lands, united under his sandals".

Divinities : 1 - Monthu 15 16 17 18

ḏd mdw in Mntw nṯr ᶜȝ ḥry-ib Bḥdt di. f ᶜnḫ nb n nsw bit ( ) *sȝ Rᶜ* (Ptolemy *ᶜnḫ ḏt mri Ptḥ*) (*E.* VI, 290, 7 - 8).

1. *Iwn-mwt.f* "Pillar of his mother" : an epithet of the young Horus and a priestly title. For this title see Mohiy Ibrahim, "*Aspects of Egyptian Kingship according to the Inscriptions of the Temple of Edfu*" (Ph.D. Thesis, Liverpool, December. 1966), pp. 203 — 204.

2. to be read *itm.* See *Ann. Serv.* 43, p. 222, n. 154 (a) where we find as (i).

"Words to be said by Monthu, the great god, residing in Beḥdet. He gives all life to the king of Upper and Lower Egypt ( ) Son of Re (Ptolemy, may he live for ever, beloved of Ptah)".

2.—*Atum.* 19 20 21 22

ḏd mdw in itm nb tꜣwy iwny di.f ḥb-sd ꜥšꜣw n nsw bit ( ) *sꜣ Rꜥ* (Ptolemy *ꜥnḫ ḏt mri Ptḥ*) (*E.* VI, 290, 9-10).

"Words to be said by Atum, lord of the Two Lands, the Heliopolitan. He gives many jubilees to the king of Upper and Lower Egypt ( ) Son of Re (Ptolemy, may he live for ever, beloved of Ptah)".

3.—*Shu.* 23 (sic) 24 25 26

ḏd mdw in šw sꜣ Rꜥ ḫnty st-wrt di.f ꜥnḫ wꜣs nb snb nb <*n*> *nsw bit* ( ) *sꜣ Rꜥ* (Ptolemy *ꜥnḫ ḏt mri Ptḥ*) (*E.* VI, 290, 11-12).

"Words to be said by Shu son of Re, pre-eminent in *St-Wrt*. He gives all life, all dominion, all health <to> the king of Upper and Lower Egypt ( ) Son of Re (Ptolemy, may he live for ever, beloved of Ptah)".

4.—*Tefnut* 27 28 29 30

ḏd mdw in Tfnt sꜣt Rꜥ ḫnty Nst-Rꜥ di <*s*> *ꜣw-ib nb n nsw bit* ( ) *sꜣ Rꜥ* (Ptolemy *ꜥnḫ ḏt mri Ptḥ*) (*E.* VI, 290, 13-14).

"Words to be said by Tefnut, the daughter of Re pre-eminent in the Throne of Re. <She> gives all joy to the king of Upper and Lower Egypt ( ) Son of Re (Ptolemy, may he live for ever, beloved of Ptah)".

5.—*Geb* 31 32 33 34

ḏd mdw in Gb nṯr ꜥꜣ ḥry-ib Bḥdt di.f wꜣs nb n nsw bit ( ) *sꜣ Rꜥ* (Ptolemy *ꜥnḫ ḏt*) (*E.* VI, 290, 15-16).

"Words to be said by Geb, the great god, residing in Behdet. He gives all dominion to the king of Upper Lower Egypt ( ) Son of Re (Ptolemy, may he live for ever)".

6.—*Nut.* 35 36 37 38

ḏd mdw in Nwt wrt ms nṯrw di.s snb nb n nsw bit ( ) *sꜣ Rꜥ* (Ptolemy *ꜥnḫ ḏt mri Ptḥ*) (*E.* VI, 291, 1-2).

"Words to be said by Nut, the great, who gave birth to the gods. She gives all health to the king of Upper and Lower Egypt ( ) Son of Re (Ptolemy, may he live for ever, beloved of Ptah)".

7.—*Osiris* 39 40 41 42

ḏd mdw in Wsir iwny nṯr ꜥꜣ ḥry-ib Bḥdt di.f wsr nb n nsw bit ( ) *sꜣ Rꜥ* (*Ptolemy ꜥnḫ ḏt mri Ptḥ*) (*E.* VI, 291, 3-4).

"Words to be said by Osiris, the pillar-god, the great god, residing in Behdet. He gives all power to the king of Upper and Lower Egypt ( ) Son of Re (Ptolemy, may he live for ever, beloved of Ptah)".

8.—*Isis* 43 44 45 46

ḏd mdw in ꜣst wrt mwt nṯr ḫnty Wtst-Ḥr di.s nst n nsw bit ( ) *sꜣ Rꜥ* ( ) (*E.* VI, 291, 5-6).

"Words to be said by Isis, the great, the god's mother, pre-eminent in *Wṯst-Ḥr*. She gives the throne to the king of Upper and Lower Egypt ( ) Son of Reꜥ ( )".

9.—*Horus.* 47 48 49

50

ḏd mdw in Ḥr m ḥt ꜥꜣ(t) nṯr ꜥꜣ ḥry-ib Bḥdt di. f ḥb-sd n nsw bit ( ) *sꜣ Rꜥ* ( ) (*E.* VI, 291, 7-8).

"Words to be said by Horus in the Great Mansion[1], the great god, residing in Behdet. He gives the jubilee to the king of Upper and Lower Egypt ( ) Son of Re ( )".

10.—*Nephthys* 51 52 53

54

ḏd mdw in Nbt-ḥt wḏ (t) nsrt ḫnty st-Rꜥ wd(t). s nsrt.s r ḫftyw n nsw bit ( ) *sꜣ Rꜥ* ( ) (*E.* VI, 291, 9 - 10).

"Words to be said by Nephthys, who emits fire, pre-eminent in the Seat of Re. She sends forth her fire against the enemy of the king of Upper and lower Egypt ( ) Son of Reꜥ ( )".

11.—*Horus.* 55 56

57 58

ḏd mdw in Ḥr-Bḥdty nṯr ꜥꜣ nb pt di. f kn nḫt n nsw bit ( ) *sꜣ Rꜥ* ( ) (*E.* VI, 291, 11-12).

"Words to be said by Horus the Behdetite, the great god, lord of heaven,. He gives valour, and victory to the king of Upper and Lower Egypt ( ) Son of Re ( )".

1. and not (collated).

12.—*Hathor* 59 60 61

62

ḏd mdw in Ḥwt-Ḥr nb(t) iwnt ḫnty Wṯst-Ḥr di.s tꜣwy idbw n nsw bit ( ) *sꜣ Rꜥ* ( ) (*E.* VI, 291., 13 - 14).

"Words to be said by Hathor, Mistress of Denderah, pre-eminent in *Wṯst-Ḥr*. She gives the Two Lands and the banks to the king of Upper and Lower Egypt ( ) Son of Re ( )".

13.—*Tenenit* 63 64 (sic) 65

66

<*ḏd mdw in*> *Tꜣ nnt ḫnty Nst-Rꜥ di.s ꜥḥꜥw nb n nsw bit* ( ) *sꜣ Rꜥ* ( ) (*E.* VI, 291, 15 - 16)

"<Words to be said by> Tenenit, pre-eminent on the Throne of Re. She gives a long life-span to the king of Upper and Lower Egypt ( ) Son of Re ( )".

14.—*ꜥIwnyt* 67 68 69

<*ḏd mdw in*> *Iwnyt ḫnty Ḥwt-ḳn di.s nsyt nb n nsw bit* ( ) (*E.* VI, 292, 1—2).

"<Words to be said by> ꜥIwnyt, pre-eminent in the Mansion of the Valour. She gives all kingship to the king of Upper and Lower Egypt ( )".

The divinities 70

di.n n.k ḥbw-sd ꜥšꜣw wrw sk sw m ḥḳꜣ tꜣwy iꜣwt.n nst.n ḥḳꜣ (t).n nsyt.n iwꜥ(t).n tp-tꜣ iw.k m nsw mn. ti ḥr srḫ ḫnty kꜣw ꜥnḫw ḏt (*E.* VI, 292, 3 — 4).

"We give thee very many jubilees. Thou[1] being the ruler of the Two Lands. Our kingly office, our throne, our rule, our kingship, our inheritance upon earth; while thou being the king abiding upon the Serekh at the head of the living beings for ever".

The second scene[2]:

The king is represented seated under a light canopy, facing right, wearing the Double Crown, holding in his right hand the sceptre and the flail, while in the other hand is the mace. The light canopy is carried by the souls of Pe who are in front and the souls of Nekhen who are at the back. In front of the souls of Pe stands Thoth proclaiming the divene decree to the *ḥnmmt*, the *ꞽḫyt* and the *pꜥt* who are represented in the attitude of acclamation.

The title of the scene seems to be the short horizontal line above the king and reads[3] : "Induction into the house of jubilee". No offering formula is given, but here we put the whole text:

The King [1]

ꜥnḫ nṯr nfr ḫꜥ m nfrt nfr ḥr m šwty wr ꜥin ḵꜥ ḥr tnṯꜣt ...... [šmꜥ.s] mḥw.s ḥtp ḥr wpt.f šsp.n.f ḫꜥw n Rꜥ bꜣw P bꜣw Nḫn ꜥwy.sn ẖr.f ḫr wṯs.f ⁝ nb pḏt 9 iw.f m nsw ḥr st Ḥr ḫnty kꜣw ꜥnḫw ḏt (*E.* VI, 292, 6-8).

"Long live the good god, who is crowned with the White Crown, beautiful of face with the great double plumes, lovely of appearance on the jubilee dias .... [The Upper Egyptian and the Lower Egyptian Crown] rest upon his brow.

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1. should be

2. *E.* VI, 292, 6 — 293, 13 = X, pl. 153 = XIV, pls. 598 — 599.

3. *E.* VI, 292, 10.

He has received the diadems of Re. The souls of Pe and the souls of Nekhen, their arms bear him, raising him up to be the lord of the Nine Bows, while he is the king on the seat of Horus, at the head of the living beings for ever".

Above him [2] *behind him*

nsw bit ( ) *sꜣ Rꜥ* ( ) *bsi r pr ḥb-sd behind him sꜣ ꜥnḫ wꜣs nb ḥꜣ.f mi Rꜥ ḏt* (*E.* VI, 292, 9 - 10).

"King of Upper and Lower Egypt ( ) Son of Re ( ). Induction into the house of jubilee. *Behind him*: May all protection, all life, all dominion surround him like Re for ever".

Under the canopy [3] [4] (?) [5] [6] [7] [8] [9] (sic)

tꜣwy nb ḫꜣswt nb ḥꜣty nb n [nnt] n nṯr pn nfr iw nb.f pḫr.ti m [ḫꜣswt] ḫt.f m ẖꜣkw-ib iw rdwy.f ḥr tyty ḫftyw.f iw nsrt.f r wbd rḵyw.f iw ḥmr.f ḏd.tw ẖr.f mi Rꜥ di.f sw m ꜣḫt iw.f [m nsw ḥr st] Ḥr ḫnty kꜣw ꜥnḫw ḏt. (*E.* VI, 292, 11-14).

ꜥnḫ nṯr nfr ḫꜥ mi Rꜥ mꜣw.f sšp tꜣwy mꜥḥ.f [tꜣ] bꜥḥ.tw m nfrw.f ḥr nb ḥꜥꜥ.ti n mꜣꜣ.f nṯrw nṯrwt m-sꜣ n ḥꜥw.f mi Rꜥ di.f sw m dwꜣw (*E.* VI, 292, 15 - 16).

"All the lands, all the foreign lands, all the clouds[1] of [the sky] for (?) this good god. His flame pervades [the foreign lands], his fire is among the disaffected ones, while his feet trample on his enemies, and his flame will burn his opponents. His throne is firmly fixed when bearing him like (that of) Re when he shows himself in the horizon. He being [the king on the seat of] Horus at the head of the living beings for ever.

"Long live the good god, who shines like Re, whose beams illuminate the Two Lands while he is in his palace. [The land] is flooded with his beauty, every one rejoices at seeing him, the gods and the goddesses being the protection of his body like Re when he shows himself at dawn".

Legends of the porters: 1-*The souls of Pe*

ḏd mdw in bꜣw p iw.n.k [pr-wr] iw.n.k pr-nsr [iw.n.k] ꜥḥ šmꜥw iw.n.k. ꜥḥ mḥw [iw.n]. k ḥb-sd iw.n.k tꜣwy nb mi Rꜥ iw. n.k pḏt 9 dmḏ ḫr ṯbwy.k nṯr pn nfr nsw bit ( ) *sꜣ Rꜥ* (Ptolemy *ꜥnḫ ḏt mri Ptḥ*) *mi Rꜥ ḏt ḥḥ*. (*E.* VI, 292, 17 - 293, 2).

"Words to be said by the souls of Pe: The [*pr-wr*] belongs to thee. The *pr-nsr* belongs to thee. The Upper Egyptian palace [belongs to thee]. The Lower Egyptian palace belongs to thee. The jubilee [belongs to] thee. All the lands belong to thee like Reꜥ. The Nine Bows belong to thee, united under thy sandals. O thou good god, king of Upper and Lower Egypt ( ) Son of Re (Ptolemy, may he live for ever, beloved of Path) like Re for ever and ever".

1. *ḥꜣty* means "garment, linen, cloth" and *ḥꜣty n nnt* means "the cloth of he sky i.e. the clouds", see *Wb.* III, 35 (8—12) and for this particular passage see reference *n.* 15.

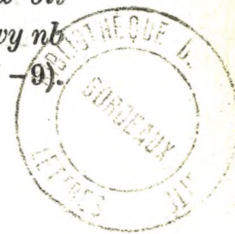
2.—*The souls of Nekhen*

ḏd mdw in bꜣw Nḫn smꜣ.n.k. rsy mḥw imnt iꜣbt ḫꜣswt nb(t) ḥryt.k m ibw.sn tꜣwy nb ḫꜣswt nb(t) sni.sn-tꜣ m ḥr.k nfr mi ntt ntk nb.sn šmꜥ mḥw dmḏ ḫr ṯbwy.k ḫꜣswt nb(t) ḫꜣb n bꜣw.k nsw bit ( ) *sꜣ Rꜥ* ( ) (*E.* VI, 293, 3 – 6).

"Words to be said by the souls of Nekhen: Thou hast united the south, the north, the west and the east. All the foreign lands, terror of thee is in their hearts. All the lands, all the foreign lands, they kiss the earth before thy beautiful face, because thou art their lord. Upper Egypt and Lower Egypt are united under thy sandals. All the foreign lands are bowed down to thy might. O king of Upper and Lower Egypt ( ) Son of Re ( )".

Thoth

ḏd mdw in Ḏḥwty nb mdw nṯry n nṯrw nṯrwt imyw Wṯst ir.tw wḏwt n Ḥr Bḥdty nṯr ꜥꜣ nb pt itm nb tꜣwy iwny n nsw bit ( ) *sꜣ Rꜥ* (*Ptolemy ꜥnḫ ḏt mri Ptḥ*) *iw.n.f tꜣwy nb ḫꜣswt nb(t) dmḏ ḫr ṯbwy. f mi Rꜥ ḏt ḥḥ* (*E.* VI, 293 7 – 9).



"Words to be said by Thoth, lord of the divine speech (hieroglyphic) to the gods and the goddesses who are in Wetjeset. Let there be proclaimed the decree of Horus the behdetite, the great god, lord of heaven-Atum, lord of the Two Lands, the Helioplitan, for the king of Upper and Lower Egypt ( ) Son of Re (Ptolemy, may he live for ever, beloved of Ptah). All the lands, all the foreign lands belong to him, united under his sandals like Re for ever and ever".

The adorers: 1.—*Ḥnmmt*[30]

ḥnmmt m ḥꜥꜥ ḫft mꜣꜣ ḥr.k tḫḥw ḫnty imi-st-ꜥ. sn (*E.* VI, 293, 10 – 11).

"The people are in joy at the sight of thy face. Exaltation is in their hearts[1]".

2.—*Rḫyt*[32]

rḫyt m i[hy mꜣꜣ].sn snḏ.k pḫr m ḥꜣt.sn (*E.* VI, 293, 12).

"The people are in [acclamation] when they [perceive] thy fear pervading their hearts".

3—*Pꜥt*[32]

pꜥt [m] hnw n bꜣw.k ꜥwy.sn twt m ꜥkꜣ n [ḥr.k n] fr (*E.* VI, 293, 13).

"The patricians are [in] jubilation to thy might. Their arms (rasied) in union before [thy beautiful face]".

CONCLUSION

We have been told that in the coronation ceremonies, the new ruler, after the crowning, has to be led into the presence of the principal god that he may recognise and proclaim his kingship. The principal god's recognition of the new ruler is then embodied in a decree which is read by Thoth

1. For *imi -st-ꜥ* "heart" see *Z.Ä.S.* 91, pp. 4 — 5.

(or *iwn-mwt.f*) to the Ennead and the assembled gods of Upper and Lower Egypt. The new sovereign is officially proclaimed as the god's legitimate successor, and the Ennead give their endoresement[1].

In Edfu Temple there is no mention to these events, but these two jubilee texts throw additional and valuable light upon this point. It is true that the coronation ceremonies and the episodes of the jubilee are very much the same, but one has to remember that they differ from each other in some points.

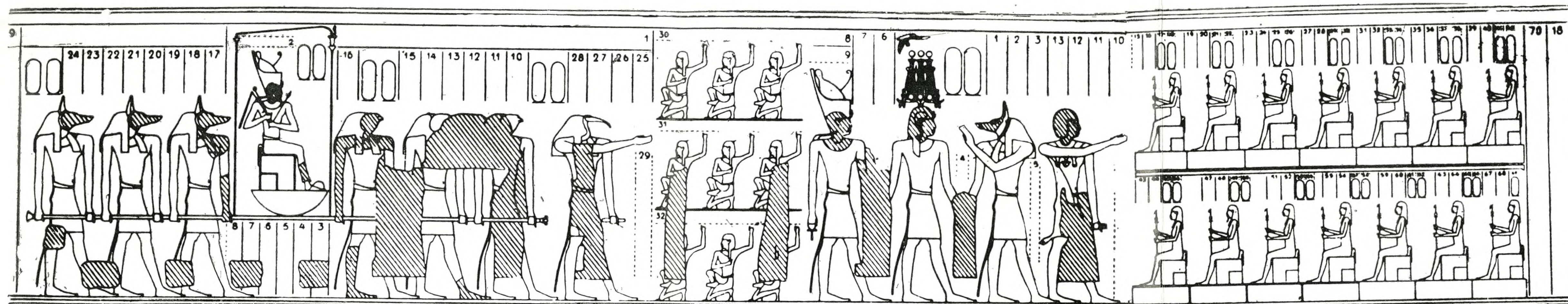
For example we cannot say that the locality of this proclamation to the people, in the coronation episodes, was in "the house of the jubilee" as the title of the second scene indicates, but it was the Balcony of the Temple of Edfu which is between the towers of the Pylon and above the main gate. Scenes showing the Pharaoh in the balcony of either the palace or the temple are quite frequent. The balcony was used for these purposes as well as for others, as when the king rewarded his officials.

Thus we can say that the purpose of the royal induction[2] into the presence of the principal god, is to recognise the new ruler, to bless him and to affix his diadems, and to give him his kingship. The king having thus been recognised and the kingship having been handed over to him, *iwn-mwt.f* proclaims the divine decree to the gods and the goddesses of Egypt who give their endorsement and Thoth proclaims this divine decree to the whole population, who give their adoration and acclamation to the new ruler.

MOHIY E.A. IBRAHIM

1. See H. W. Fairman and B. Grdseloff, "Texts of Hatshepsut and Sethos I inside of Speos Artemidos" in *J.E.A.* 33, pp. 12 — 33, esp. pp. 15 — 17; p. 12, fig. 1 (4) and pl. 111, 4; p. 12, fig. 1 (3) and pl. 111, 3.

2. For the episodes of the coronation according to Edfu Temple see Mohiy Ibrahim, "*Aspects of Egyptian Kingship according to the Inscriptions of the Temple of Edfu*;" (Ph.D. Thesis, Liverpool, December 1966), pp. 71 — 72.



2nd Scene

1st Scene

From E.X, Pls. 152 - 153

Pl. I

FURTHER EVIDENCE OF DENTAL PROSTHESIS IN ANCIENT EGYPT

BY

ZAKY ISKANDER, JAMES HARRIS
AND SHAFIK FARID

In a previous article by Iskander and Harris (1), it has been noted that the Ancient Egyptians attempted to prevent the loss of a loose tooth by two means, namely : pharmaceutical treatment and dental prosthesis. The pharmaceutical treatment comprised applying certain medicaments around the loose tooth or between it and the gum. In the Ebers Papyrus several prescriptions are given for such treatment (2,3).

Dental Prosthesis was undoubtedly practiced in Ancient Egypt since very early times, and even on a comparatively high standard. In support of this statement some evidence has been previously published with reference to some authentic specimens of Egyptian workmanship. Three of these specimens were found in different places in Egypt itself, while two others, supposedly Egyptian, were found outside Egypt.

In the present article further evidence afforded itself through the recent discovery of another prosthetic device at Qatta. This specimen is to be described in some detail. The examination of this device, however, drew our attention to some observations of which we had not been previously aware. Accordingly, the previously published specimens had to be reconsidered in the light of these observations in order to have clearer picture of the technique used for Dental Prosthesis in Ancient Egypt. These specimens are dealt with in the following :

I. – *The specimens previously found in Egypt*

These consist of the following three cases :

1. — *A gold Bridge or splint found at Giza* :

This device was discovered by Junker in the shaft burial No. 984 at Giza [4]. On the evidence of the contents of this burial, it could be dated by Junker to either the late IVth Dynasty or to the early Vth Dynasty. This prosthetic device (Pl. II A and B) is now kept in the Pelizaeus Museum in Hildesheim, Germany. It was examined by Euler who reported the following :

(*i*) The colour and form of both teeth denote that they belonged to the same individual.

(*ii*) One of them was the lower left third molar and the other the left second molar.

(*iii*) They were linked together by gold wire woven around the gingival margins of the teeth.

(*iv*) The crown of the third molar or wisdom tooth showed extreme wear with roots absorbed. Because of some pathologic condition, this tooth became loose and had to be held in place by attaching it to its neighbour, a method still in practice, he said, in present-day dentistry.

(*v*) The tartar on both the teeth and gold wire indicated that the dental work was performed in the mouth of a living person.

As can be judged from the photographs, this device consisted of a second Molar around which a double strand of gold wire was passed, and a third Molar around which was also passed a similar strand, and the two strands were twisted together to form a knot between the two molars. This device is, therefore, a true dental bridge in which the lower left Second Molar acted as the abutment tooth to hold in place the Wisdom Tooth which had been loose.

2. — *A silver Bridge from Tura El-Asmant*:

This specimen (Pls. III and IV) was discovered by M.A. El Hetta in the burial T-127 at Tura El-Asmant in 1952-1953 [1]. On the basis of the technique of mummification of the bodies in the cemetery and other archaeological evidence, the specimen most probably dates back to the Late Pharaonic Period or the Ptolemaic Period. Harris examined this device and concluded the following:

(*i*) The splinted tooth here is the Right Central Incisor in the upper jaw.

(*ii*) It was fixed in position by passing a silver wire through two holes or a bifurcated hole which had been drilled in the crown of the incisor and the two ends were tied tightly to the incisors around it.

(*iii*) X-ray examination shows that its root is considerably shorter than that of the left, that there is no evidence of any periodontal structure and that there is no indication of any radiolucent areas at the tip of the root, all of which would indicate that the original tooth had been lost or removed and then replaced by the same or different tooth which had been prepared as a pontic outside of the mouth. Hence this prosthesis is an example of a true bridge.

(*iv*) Rather the recontouring of the buccal plate of the alveolus tends to support the contention that the Right Central Incisor was placed or replaced back in the upper jaw after healing of the alveolar structure had occurred.

This specimen is still kept in the Centre of Research and Conservation of Antiquities, General Organization of Egyptian Antiquities, Cairo, but it will be shortly exhibited in the Cairo Museum.

3. — *A Gold Dental Appliance found in Alexandria* :

This specimen was found in a grave in Ibrahimieh, Alexandria. It was stated by Weinberger [5] to exist in the Graeco-Roman Museum, Alexandria ; and that according to the International Dentistry, Alexandria, 1943, vol. 6, p. 584, "it probably belongs to the first century".

Weinberger also mentioned that he received a description of this device from Dr. L. Avrouskine of Alexandria as follows (6) : "The natural teeth, lower right central, lateral and cuspid, were held together with a gold wire. The teeth present an abrasion around their necks due undoubtedly to the mechanical action of the gold wire. The teeth are worn and over-calcified and I found also the presence of tartar going half way down the roots".

Weinberger published a drawing (Pl. V A). apparently sent to him by Dr. Avrouskine which he described as a drawing : "made by an expert to give a better idea of the appliance" and added that the photographs sent, being small and out of focus, could not be shown.

The authors have searched for this specimen in the Graeco-Roman Museum in Alexandria, but they could not find it. Being a very small specimen, whose real importance might have not been realized, it is possible to have been disregarded or even dispensed with. But what is really perplexing is that we could not also find the journal "International Dentistry" in Alexandria nor in Cairo. We wonder, there is some misunderstanding and perhaps this paper may induce anyone who might have some information about this journal or the dental device in question, to draw our attention to any facts he knows or to publish the information he might have.

II. *The supposedly Egyptian specimens found outside Egypt.*

As Weinberger indicated "since retentive prosthesis originated in Egypt, perhaps reappraisal of these specimens found with other Egyptian objects would indicate their Egyptian origin" (7). This statement applies, indeed, to the following two cases :

1. *The Phoenician Specimen in the Louvre*

This specimen was found in 1862 in a tomb in one of the most ancient parts of the necropolis of Ancient Sidon (8). It was first described by Gaillardot, the medical assistant of the mission, then by many other scholars(9).

The figure of this device shown in Pl. V B is reproduced from the article of Weinberger who reported that, it consists of the six lower anterior teeth united together with gold wire, two of the incisors appear to have belonged to another individual and to have been applied as substitutes for the lost teeth. Together with this specimen in the same tomb was found a quantity of small objects such as two copper coins, an iron ring, a vase of most graceful outlines, a scarab and twelve very small statuettes of majolica (faience) representing Egyptian deities. Guerini commented that "if there were dentists in Sidon capable of applying false teeth, it may reasonably be admitted that the dentists of the great Egyptian metropoli at Thebes and Memphis were able to do as much and more" (10). However, the fact that all the objects found with this device were of Egyptian origin, may favour that the burial was for an Egyptian, and that this device had been made for him in Egypt, This specimen, together with the other objects, is now kept in the Louvre in Paris and its date is indicated as the Fourth Century B.C.

2. *The "Ford" Specimen, in Beirut*

This specimen was discovered in 1901 by the American School of Oriental Research of Jerusalem (11) approximately a mile south-east of Sidon in the Southern Lebanon and just in full view of the necropolis from which the first specimen mentioned above was found. This dental appliance which is known as the "Ford Mandible" is now on display in the Archaeological Museum, American University of Beirut. From the archaeological considerations, it is dated to the Fifth century B.C.

Like the previous specimen, it consists also of a gold wire ingeniously woven around and firmly binding together the six lower anterior teeth (Pl. VI A). All the teeth appear to be the original teeth of the mandible. It was studied by Clawson (12), and the conclusions given by him are the following (5).

i. It is one of the few existing dental appliances of ancient times in which we can plainly see that the owner derived service as well as aesthetic benefit by its application.

ii. The skeletal remains and the appliance are in such splendid state of preservation that we do not have to draw on our imagination to understand its function.

iii. Pyorrhea was existing and more or less successfully dealt with by dentists 2500 years ago.

iv. The type and condition of the tomb allow archaeologists to date the appliance with great accuracy.

v. And last but not least, it is one of the few discoveries which has remained in the country of its origin.

Clawson added that the appliance was "an attempt to keep the diseased teeth in the mouth by retentive prosthesis, and not an attempt to replace lost dental organs". Indeed this statement applies also to all the four cases of dental prosthesis found in Egypt itself since the diseased teeth are most likely those which had been re-used and not the teeth of other individuals

Along with the skeletal remains there were also buried many valuable articles such "as a gold finger ring, and twelve small statuettes of Egyptian faience representing Egyptian deities pierced for stringing''.

Weinberger as well as most other writers stress that since both appliances were found with typical Egyptian objects, this may indicate that they were from persons of Egyptian ancestry , buried in Phoenica; and if so, it is reasonable to believe that the dental work was performed by an Egyptian (9).

III. *The Recently Discovered Gold Bridge*

(a) Discovery and Date :

This specimen was discovered by Shafik Farid in 1952 in the cemetery of El- Qatta (near Imbaba), which

is located on the edge of the Western Desert at a distance of about 40 Km to the N. W. of Cairo. The mastaba (Tomb No. 90) in which it was found is rectangular, about 39 m long and 25 m wide and dated back to the Old Kingdom and most probably to the IVth Dynasty. The mastaba suffered terribly during the Roman Period since its superstructure was used then as a burial place. Accordingly its height when discovered did not exceed 1.5 m (Pl. I).

Inside the mastaba were six shafts with side burial chambers. Some of the chambers were found intact with doors built up of mud bricks. The shaft which is of interest to us is shaft No. 5 which measures 2.0 x 2.10 x 5.5 m deep. It ends at the bottom with a chamber to the south measuring 3.0 x 2.0 x 1.6 m high. A mud-brick wall closed the door of the chamber. After removing this wall, the bones of a human skeleton were found in bad state and almost completely crushed by large pieces of stone which fell on the body.

In the burial were found two corroded copper plaques 3.5 x 1.5 cm and 3.2 x 1.8 cm (Excavation Reg. No. 59). In the middle of the crushed bones of the skull was noticed a gold wire binding three teeth (Reg. No. 58) in good state (Pl. VI B) the middle of which being pierced. This gold dental device was handed over to the Cairo Museum on 31st March, 1960 together with all the other pieces discovered at El - Qatta.

(b) Presentation to Examination :

At the time of its discovery, no one realized how important is this dental appliance for the history of Dentistry. Accordingly it was overlooked until 7 th February 1974 when Shafik Farid drew the attention of Zaky Iskander to it. Dr. Henry Riad, then Director General of the Cairo Museum, Dr. Abd El - Qader Selim then First Curator of the Museum and Mrs. Mahassen Moussa then curator of the Museum, were kind enough to search for the specimen and deliver it to us for examination and study.

(c) Description :

The specimen was presented to us consisting of a cuspid around which has been placed a double strand of gold wire twisted into a knot on the distal surface. This tooth (cuspid) appears to have been vital and represents one of the abutments for a bridge.

In addition, two teeth placed on a long gold wire completed the specimen :

(1) One of the two teeth appears to be a central Incisor where a hole has been drilled in a mesial distal direction through the crown. The root of this tooth has been scraped to give the root a smooth and artificial appearance, and also a buccal groove has been prepared parallel to the hole to accommodate the gold wire from outside.

(2) The other tooth has the gold wire wrapped around it with a labial groove prepared to accommodate this wire. This tooth would appear to be a lateral incisor, and the root has been scraped giving it an artificial morphology. In addition, considerable tartar is found on the gingival two thirds of the root.

The abutment tooth (cuspid) has a gold loop in the wire which was twisted around it on its distal surface. To this loop was attached by a hook the gold wire on which were placed the two teeth just described.

However, a detailed study of the anatomy of the cuspid which exhibits a characteristic deep groove on the lingual root with a distal tipping of the root would strongly support the argument that this tooth is an upper maxillary right cuspid. Since the crown is very worn, one cannot reject the possibility that this tooth may be a lower left cuspid. In either case, the other two units found with the cuspid represent anterior teeth (central and lateral incisors) and hence the arrangement of the three teeth is now improper. The teeth on the wire must have been attached in vivo to the mesial (lateral side of the tooth toward the mid-line) of the

cuspid. In other words, this prosthesis was originally an anterior bridge. The arrangement of the three teeth as presented to us must have been, therefore, changed since its discovery or post mortém.

We support a different arrangement of the three teeth (see Pl. VII) which appears to have been part of a four - unit bridge ([13]). The bridge appears to consist of a maxillary right cuspid and artificially prepared lateral and central incisors and a left central incisor abutment which has been lost with the broken parts of the skull. This arrangement would be further supported by the fact that an anterior bridge would serve a useful aesthetic function and, indeed, the substitute teeth were from anterior teeth. The only other alternative, which is unacceptable in our judgement, would be to place the substitute teeth distal or posterior to the right maxillary cuspid which could serve no functional purpose and would offer little aesthetic improvement.

The fact that calculus (tratar) was found on the cuspid and the substitute lateral incisor demonstrates that the bridge was worn by the patient for relatively long period of time.

To review or summarize the description of the bridge; it consisted of a right maxillary cuspid abutment tooth around which was fixed two strands of gold wire twisted into a loop on the distal surface. Attached to the cuspid was an artificially prepared lateral incisor with a groove on the labial surface and this tooth was held in place by the gold wire passing around the crown of the tooth. The next unit of the bridge is an artificially prepared central incisor which consisted of a tooth with a hole drilled through the crown in a mesial distal direction and with a labial groove on the crown. This tooth was held in place by the gold wire both passing through and around the clinical crown. This tooth was attached to a left central incisor by passing the gold wire around its clinical crown in the same way as in the right maxillary cuspid (see Pls. VIII - X)

There is no question, therefore, that the device under consideration is a dental bridge which was made for the patient during life and was worn by him for a relatively long period before he died. The making of this bridge for the patient proves that the Ancient Egyptians practiced dental prosthesis in the proper sense during the Old Kingdom. This fact has been denied by Filce leek[14] who tried to refute the arguments put forward to support the existence of specialization in dentistry by many scholars especially junker[15] and Weinberger[6].

Leek based his argument on the lack of evidence of any dental prosthesis demonstrating that the Ancient Egyptians practiced restorative dentistry except for the dental bridge or splint discovered by Junker at Giza. Although Paul Ghalioungui[16] refuted Leek's arguments, the dental bridges or devices discussed in this paper prove beyond any doubt that the Egyptians practiced dentistry in its true sense as far back as the Old kingdom.

Z. Iskander, J. Harris
Shafik Farid

REFERENCES

1. **Zaky Iskander and James E. Harris,**—A Skull with Silver Bridge to replace a Central Incisor, Annales du Service des Antiquités de l'Egypte, T. LXII (1977), pp. 85—90.

2. **Hermann Grapow,**—Grundriss der Medizin der alten Ägypter, Vol, IV, 1, p. 65; and Vol. V, p. 111-112.

3. **E. Ebell**—The Papyrus Ebers, the greatest Egyptian medical document (Translation), Copenhagen, 1937, Chapter LXXXIX, p. 103.

4. **Hermann Junker,**—Giza I, Die Mastabas des IV Dynastie auf dem Westfriedhof. Akademie der Wissenschaften in Wien, Philosophisch-historische Klasse, Denkschriften, Band 69/1, Vienna, 1929, p. 256-257, Taf. XL, C ; Walter Hoffmann-Axthelm, Die Geschichte der Zahnheilkunde, Buck-und Zeitschriften-Verlag "Die Quintessenz", Berlin, 1973, p. 13, Abb 10.

5. **B.W. Weinberger,**—The Dental Art in Ancient Egypt, The Journal of the American Dental Association, Vol. 34, Feb. 1947, p. 183.

6. **B.W. Weinberger,**—Further evidence that Dentistry was practised in Ancient Egypt, Phoenicia and Greece, Bulletin of the History of Medicine, Vol. XX, No. 2, July, 1946, Baltimore, p. 194, Fig. 7.

7. **B.W. Weinberger,**—The Dental Art in Ancient Egypt, J.A.D.A., Vol. 34, p. 182.

8. **J.E. Renan,**—Mission de Phenicie, et la compagne de Sidon, Paris, p. 472.

9. **B.W. Weinberger,**—Further Evidence, Bulletin of the History of Medicine, Vol. XX (1946), p. 193, Fig. 4.

10. **V. Guerini,**—History of Dentistry, Philadelphia, 1909, p. 31.

11. **Charles C. Torrey,**—The Annual of the American School of Oriental Research in Jerusalem, New Haven, 1920, I, Figs. 14-15.

12. **M.D. Clawson,**—A Phoenician Dental Appliance of the 5th Century B.C., Tr. Am. Dent. Soc. Europe, 1933, pp. 142-160; Phoenician Dental Art, Berytus, 1934, 1: 23-31.

13. **J. Harris**, Z. Jskander and Shafik Farid - Restorative Dentistry in Ancient Egypt. An Archaeologic Fact, the Journal of the Michigan Dental Association, vol, 57, 1975, p. 401-404.

14. **F. Filce Leek,**.—The Practice of Dentistry in Ancient Egypt, the Journal of Egyptian Archaeology, Vol. 53, Dec. 1967, p. 51.

15. **H. Junker,**—Die Stele des Hofarztes "Iry" in ZÄS. 63 (1928), p. 53-70.

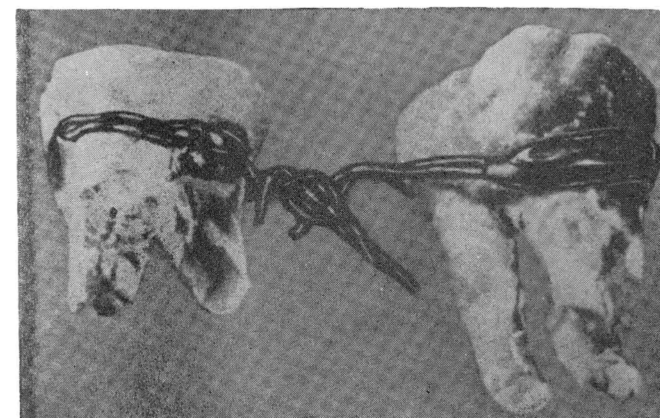
16. **P. Ghalioungui,** Did a Dental Profession exist in Ancient Egypt, Medical History, Vol. XV, Number 1, January 1971, p. 92-94.



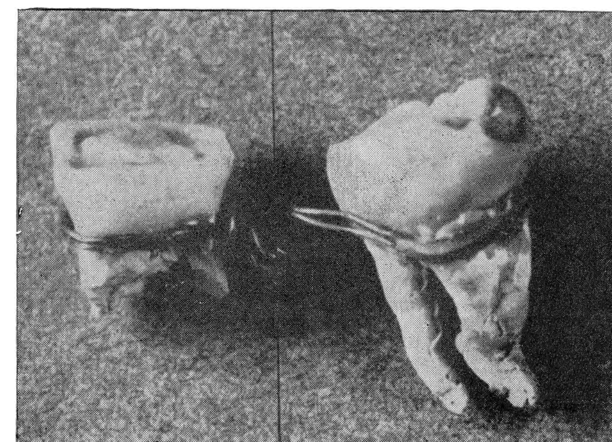
Tomb No. 90 at El-Qatta, Giza.

Pl. I

A



B



A and B - The gold bridge found at Giza, IVth Dynasty, Pelizaeus-Museum Hildesheim, Inv. 2453 (Courtesy of the Pelizaeus - Museum, Hildesheim, and. the German Institute of Archaeology, Cairo).



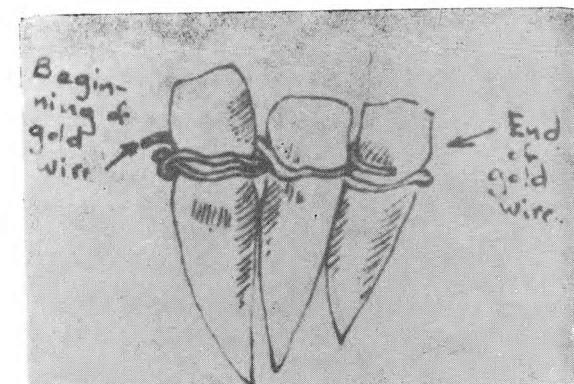
The Silver Hetta Bridge from Tura El-Asmant, front view
(Photo by Dr. M.J.J. Quenouille)



The Silver Hetta Bridge, A Back view

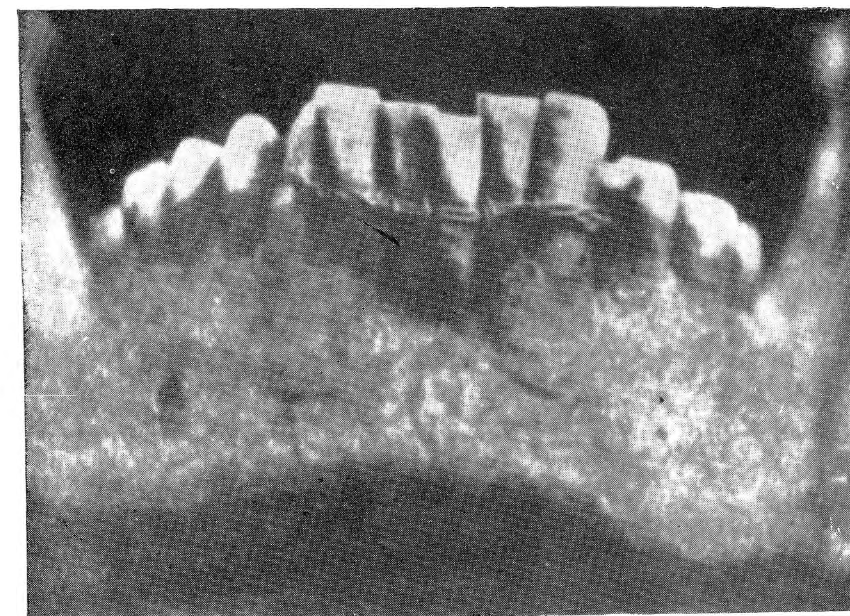
(Photo by Dr. M.J.J. Quenouille, Fraisans, 39700 Orchamps, France).

A



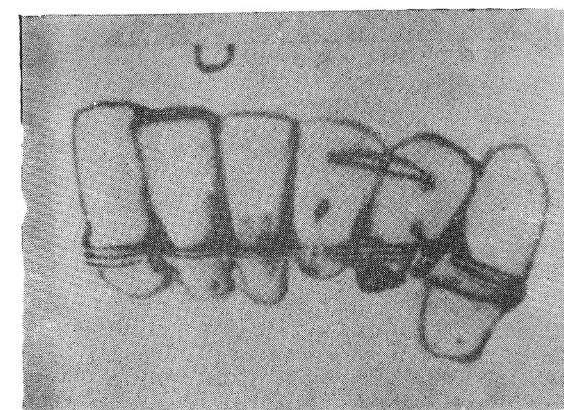
A gold dental appliance found in Alexandria

B



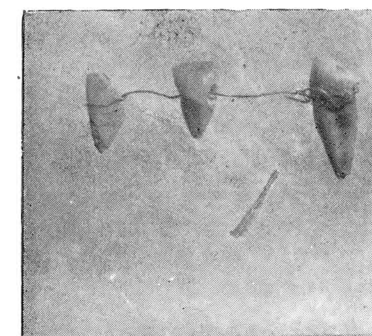
B — The phoenician dental device in the Louvre (reproduced from B.W. Weinberger, Furthr evidence that Dentistry was practised in Ancient Egypt, Phoenicia and Greece, Bulletin of the History of Medicine, Vol. (XX), No. 2, Figs. 7 and 4 respectively).

A



A—The "Ford" Specimen, Archaeological Museum, American University of Beirut. (reproduced from B.W. Weinberger, The Dental Art in Ancient Egypt, J.A.D.A, Vol. 34, p. 182).

B



B—A gold wire binding three teeth found in the tomb No. 90 at El-Qatta, Giza.

Pl. VII



The correct arrangement of the three teeth in the Qatta bridge. They were probably re-assembled wrongly after discovery, Cairo Museum No. $\frac{8}{75}\Big|\frac{2}{1}$.



The lingual view of the Qatta Bridge assembled according to the authors' contension that the cuspid was a right maxillary abutment tooth to which an artificially prepared maxillary lateral and central incisors have been attached. Note that the gold wire passes through the Central Incisor.



The mesial view of the cuspid and Lateral Incisor. Note the groove prepared to accomodate the gold wire on the labial surface of the Central Maxillary Incisor, and the tartar on the cuspid and the Lateral Incisor.



The distal view of the Maxillary Cuspid and Lateral Incisor with a lingual view of the Central Incisor. Note the tartar on the Cuspid and the Lateral Incisor.

STUDIES FOR DISCUSSION ABOUT KING AHMOSE'S TOMB

BY

IBRAHIM KAMEL

Curator of the Coptic Museum

PREFACE

Dr. the Director General of Antiquities.

There are no ancient documents which may furnish us with an accurate answer to the question: Where is the royal burial-place of King Ahmose 1*st*., the founder of the eighteenth dynasty ?

Through these pages, I have the honour to give a brief account of some discussions and explanations about the royal tomb of this King and its position in the Theban Necropolis. The studies I made whilst I was the curator of the Necropolis from 1951 to 1958, helped me much. Meanwhile I was encouraged by Dr. Pahor Labib, the ex-director of the Coptic Museum, who is also interested in the same subject, to collect the material. As soon as the article, including these studies in Arabic, was finished; Dr. Pahor was kind to forward it to Dr. Tharwat Okasha, the Minister of Culture on November 1966. A Copy of it was filed at the Scientific Archives of the Antiquities Department.

The points published here, are accompanied by enough discussion to make them fairly intelligible, and I hope these studies may throw light on the discovery of the king's tomb.

I wish to thank Dr. Labib Habachi for reading this essay, for his sound advice and for his valuable remarks.

IBRAHIM KAMEL
June, 1970

I

Although Ahmose I was the founder of the Eighteenth Dynasty according to the table transmitted by the historian Manetho, yet he was a member of the seventeenth Dynasty which ruled over Egypt for more than twenty hundred years. Thus, it is logically understood that the position of his tomb must be near the royal tombs of his ancestors. So, we have to start, at least, with the burial - places of these last sovereigns, and their distribution in the Theban Necropolis. The list of the last nomarchs of the seventeenth Dynasty begins by Teti-sheri, who was mentioned through the documents of the Eighteenth Dynasty as the wife of "Tꜣʿꜣ" the first, or "Tꜣʿꜣ" the great, the grandfather of Ahmose. Therefore, the list should be as follows :

Teti — Sheri + Tꜣʿꜣ the great) "Sekenenrʿ I"(1)

Iꜥḥ — ḥtp + Tꜣʿꜣ (the second) "Sekenenrʿ II"

Kꜣmes Ahmose

If the burial-places of the first Seventeenth Dynasty nomarchs are known, and at the same time, if we can point out the position of the tombs of these five personalities mentioned before, we should have limited the circle of research, through which we have to look for the royal tomb of King Ahmose, which should exist beside the centre of gravity chosen by his grandfathers and parents.

II

Before treating the positions of the tombs of the last five sovereigns, we have to deal with the Intefs, the first nomarches of the seventeenth dynasty. They were almost likely buried at Dra-Abu-el-Naga in the Theban

(1) The documents declare that Iꜥḥ-ḥtp was the wife of a king and the daughter of a king. See J.E.A. X.p. 251, note 4, So, there is no doubt about this queen, and that she was the daughter of King Tꜣʿꜣ, the great, and the wife of Tꜣʿꜣ, the second.

Necropolis. This fact is proved by many evidences as follows:

(a) Sḫm Rʿ wꜣḥ ḫʿ — Rʿḥtp

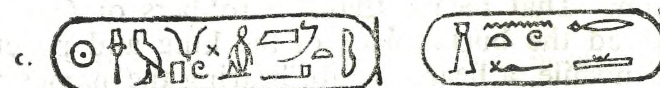


The tomb of this monarch may exist in the Theban Necropolis, although it is unexcavated uptil now (1)

(b) Sḫm Rʿ hrw ḥr mꜣʿt — Intf



(c) Sḫm Rʿ wp mꜣʿt — Intf ʿꜣ



The wooden coffin of the first "Sḫm rʿ ḥrw ḥr mꜣʿt" was found at Dra-Abu-el-Naga, while the stone-benben of the pyramid of the second king "Sḫm rʿ wp mꜣʿt" was picked up from the same place. (2)

(d) N b ḫ p r Rʿ — Intf



(1) Winlock's opinion about the existence of this tomb in the Theban Necropolis is based on the story and the adventures of the High priest of Amon during the twentieth Dynasty. The events of the story went back to the time of the Pharaoh Rʿ - ḥtp. See J.E.A. 10 p. 265 - 267. We can agree with Winlock that Dra-Abu-el-Naga was the favourite place for the royal grave of this King.

(2) The wooden coffin of King Intf ʿꜣ, may be the one which is exhibited at Louvre Museum with his canopic jars. Its was bought by Mariette in 1854 with another coffin bearing the name of Sḫm Rʿ hrw ḥr mꜣʿt - Intf. The two were found in a cachet to the extreme end of Dra-Abu-el-Naga (See Chabas., Rev. d'Arch. p.269). The locality where the two coffins existed, denote that the burial places of these two kings were near to each other and that they were in the same district. See also *J.E.A.* X.p 236-237.

The modern robbers of Qurna uncovered the tomb of this sovereign in 1827 by illegal excavations at the northern end of Dra-Abu-el-Naga cemetery. The researches of Mariette(1) proved the mentioned fact, and that the burial-place of this king was a chamber, amidst which, a stone-sarcophagus was hewn out of the live rock of the ground. The wooden gilded coffin was picked also from the place.

(e) Sḫm Rʿ wȝḏ ḫʿ Sbk m sȝ.f



Although the tomb of this pharaoh has not been found, yet, his wooden coffin and the canopic jars bearing his names and titles, are shown now in Leiden Museum. That means that the robbers of Qurna had discovered the burial-place of the king and penetrated it. Meanwhile, a heart-scarab, bearing the names of the sovereign, is now exhibited at the British Museum(2). The probability of excavating the tomb at Dra-Abu-el-Naga is believable.

(f) S ḫ m, Rʿ šd tȝwy - Sbk m sȝ.f



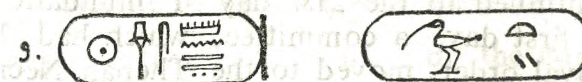
According to what is mentioned in Abbot papyrus,(3) the grave of this king should be near the burial-place of King Nb ḫpr Rʿ- Intf (d), at Dra-Abu-el-Naga. It seems that nothing had been left after the ancient robbers, and that the King's furniture had been burnt also.

(1) Maspero, Bibliothèque Égyptologique, 18. pl. CXIII. It is noted also, that blocks of two obelisks which stood once in-front of the tomb, were found in site bearing the names and titles of this king.

(2) Hall, Catalogue of Scarabs, 1211.

(3) Abbot Pap., Breasted, A.R. IV. §§ 517.

(g) Sḫm Rʿ Smn tȝwy - Ḏḥwty



The burial place of this nomarch has not yet been excavated. Winlock suggested that his tomb should be at the centre of Dra-Abu-el-Naga. At the same time Passalacqua found the wooden box, including the canopic jars, incised with the names of the king at a certain place in the Theban Necropolis ; but he did not give the accurate position of the find.

After the studies mentioned above, we can declare with certainty that the Intefs, the first grandfathers of King Ahmose, had chosen the cemetery of Dra-Abu-el-Naga, to dig their burial-places.

III

When studying the history of the nomarches of the seventeenth dynasty, we find that our source of information is based on :

A. The Abbot Papyrus(1) dating to the *16th.* years' reign of King (Ramses IX).

B. The discovered royal tombs of the kings and their locations at the Theban Necropolis.

A

We have chosen the Abbot document, because the other papyri(2), dealing with ancient robberies of King' tombs in the Theban cemetery during the time of Ramses IX, include only the enquiries and the accusations brought against the robbers.

(1) Abbot Pap., Breasted, A.R. pages from 515 and onwards; Winlock, J.E.A. vol.X. pp. 217 ff; Eric Peet, Great Tomb Robberies of the XX*th* dynasty; nd J.E.A. vol .XiV. pp. 52 ff.

(2) The most important papyri are: The Amharest Pap., which is completed by the Leopold's II pap. (so called by Capart). The two date also to the 16th. years' reign of king Ramses IX.

The succession of events began on the 18*th* day and continued to the 21*st* day of inundation season. On the first day, a committee, which had been held by a royal order, moved to the Theban Necropolis in order that it might inspect the royal burials and to forward a report about the graves which had been so-related that the robbers penetrated. If we follow the movements of the committee during their inspection reported at the Abbot Papyrus, we find that the work excuted on the 18*th* and 19*th* day is mentioned on pages II and III of the papyrus as follows :

Page II (pl. 1) includes the inspection of :-

1. The tomb of King ḏsr Kȝ - the son of Rʿ Imn ḥtp (line 2).

2. The burial of King Sȝ Rʿ n ʿȝ (line 8).

These two tombs lie to the north of Imn ḥtp temple (lines 2,8) [1].

3. The Tomb of King nb ḫpr Rʿ, the son of Rʿ Intf (line 12).

4. The burial of King Sḫm Rʿ wp mȝʿt, the son of Rʿ Intf ʿȝ (line 16).

Page III (pl. II) includes the inspection of :-

5. The burial of King Sḫm Rʿ šd tȝwy, the son of Rʿ Sbk m sȝ f (line 1).

6. The tomb of King Sḳnn Rʿ, the son of Rʿ tȝʿȝ (line 8).

7. The tomb of king Sḳnn Rʿ, Tȝʿȝʿȝ ; another king called Tȝʿȝ (line 10).

8. The burial of King wȝḏ ḫpr Rʿ, the son of Rʿ Kȝms (line 12).

(1) The two Kings are of the 14*th* dynasty, but their burials were mentioned also in the report.

9. The burial of king Iȝḥms Sȝ bir (1) (line 13).

10. The tomb of King nb ḥtp Rʿ (line 14).

Thus, we can conclude the work of the committee on that day, as mentioned on pages II and III of the papyrus in the following :-

1. The inspection began with the tomb of Intf II on the extreme north of the same district.

2. Ten royal burials had been inspected; and the committee was keen to emphasise the number of the tombs when writing the report (line 16 of pl. II), because there were two burials, each of them bears the name of Tȝʿȝ(2).

3. All the tombs inspected were at Dra-Abu-el-Naga, and that their order, according to the list mentioned, was from the north to the south of the mentioned cemetery (see plate 1).

These facts have been ascertained by the locations of the royal tombs discovered in the site.

B

The tomb of King tȝʿȝ, the great " Sḳnn Rʿ " had been excavated at Dra-Abu-el-Naga, and it was found robbed, while the tomb of King tȝʿȝ, the second "Sḳnn Rʿ " was also discovered in the same district (3).

Although the two royal burials of Queen iȝḥ ḥtp and her son, king Kȝms; are unknown uptil now, we can guess that the two graves are at Dra-Abu-el-Naga. This suggession in based on the discovery of both of the two wooden coffins of the queen and the King in site.

(1) The owner of the tomb ts the son of Ahmose I and his wife Iȝḥms Nfrtȝri. He was a prince, died early, and was buried at Drà-Abu-el-Naga.

(2) The opinion of Winlock, J. E.A. X. pp. 243ff. is now accepted by most of the scholars. It is that there were two kings bear the name of Tȝʿȝ. The first is Tȝʿȝ the great, while the second is tȝʿȝ the second who is the father of king Ahmose I.

(3) The mummy of tȝʿȝ the great was not found, either at the cachet of Deir el-Bahari, or in his tomb while tne mummy of tȝʿȝ "the second" was found at the cachet.

There is no doubt about the locality of the tomb of the qeen Teti sheri who lived long, and that her grave exists at the same district. Two of her statues, that once stood in her tomb, were found and are now in the British Museum.

Besides, the bandages, which once envoloped her mummy; were discovered at Deir-el-Bahari's cachet, Yet, we know also that Ahmose I buried his grand-mother Teti-Sheri beside and near the burials of his family.

This fact can be easily understood from the texts incised on the memorial stela erected by Ahmose I at Abydos (1).

The conclusion, is that the grand parents and parents of King Ahmose, were all buried at the Dra-Abu-el-Naga cemetery, and that if we like to discover the royal tomb of Ahmose I, our research should be concentrated in this area.

IV

If we study the geographical distribution of the private tombs scattered on the ravines of the Theban Necropolis during the first part of the eighteenth dynasty, we notice that the officials who served a certain king, had hewn their mortuary chapels and tombs in a certain district of the necropolis. That is to say that the choice of the site for the officials tombs, however was subject to certain conditions, as to the position of the funerary temple constructed by the king whom those officials served during their life. Another remarkable feature can be traced in the decorations of the tomb-chapels of those nobles. We notice that the ornamentations executed were copied from the patterns set by the pharaohs in their mortuary temples built at the necorpolis.

(1) Ayrton, Gurrelly, Weigall. "Abydos" III p. 35

Let us examine the tomb-chapels which date to the time of Ahmose I. They are three as follow :-

a. The tomb-chapel of "bꜣkꜣ", the overseer of the cattle. (1).

b. The tomb-chapel of "ḥry", the overseer of granaries of the royal wife and the royal mother "iꜥḥ ḥtp"(2). This chapel lies at foot of the main northern hill, some way north-west of the Antiquities House. Its position on Survey's Maps is D6JI.

c. The tomb-chapel of "Ttiky", the king's son and mayor of the southern city. The chapel lies at the extreme corner of the southernmost hill, near the road leading to the Deir-el-Bahari Temple. Its position on survey's Maps is D 5 J 5 (3).

The three chaples mentioned above exist at Dra-Abu-el-Naga, or by other words, we can declare that the officials and the nobles who once served king Ahmose I, had chosen this district of the Theban Necropolis for their burials. As it was the custom, that the tombs of notabilities should be grouped, after death, round their deceased master, so as to constitute his eternal court as they did during their lives. It is easy then to find the reasons for their choice : It was either the royal burial-place of King Ahmose I or his funerary temple, which compulsed those officials to dig their chapels and tombs beside and near the royal symbol.

V.

We have to return once more to the chapels of the officials attributed to the reign of King Ahmose I. By examining the sizes of these chapels, we notice that they are very small if compared with the other tomb-chapels hewn during the second part of the eighteenth dynasty. For example, the extreme length of the largest tomb

(1) Gauthier, Dra-Abu-el-Naga, p. 49.

(2) Gardiner & Weigall, Catalogue. No. 12.

(3) J.E.A. XI. p. 10 ff.; Gardiner & Weigall, Catalogue, No. 15.

does not exceed six meters, while the breadth is four meters at most. The decorations and the scenes depicted on the walls indicate no characteristic features, strong enough to help in their indentification. Indeed, these chapels can be considered as good examples for the transition period, between the Middle and New Kingdom. Meanwhile, the artist workmen, who excuted the decorations and the architectual ornamentations of these tombs, copied and imitated the scenes of the Old Kingdom Tombs.

There was a relation between the private tombs and the royal funerary temples, and the ancient craftsmen were striving to build and decorate the walls of the private chapels after the patterns set by the Kings in their own mortuary temples. In time of the seventeenth dynasty and during Ahmose's reign also, the artist-workmen, who had to execute the ornamentations of official's chapels, did not find the enough material to be copied; because there were no royal mortuary temples existing at the Theban Necropolis.

One can find other remarkable evidences relating to this fact. There are neither niches for statues, nor decorated tombs facades in the private chapels, dating to the reign of Ahmose I. And, the explanation of such features mentioned, can be attributed to what is called by Davies : the temple influence(1).

From the above discussion, we conclude that there were no royal mortuary temples existing during the seventeenth dynasty and uptil the time of Amenhotep I. Furthermore, all egyptologists agree that Amenhotep I, was the first pharaoh who made the attempt to break with the old tradition by hewing his tomb at Dra-Abu-el-Naga, at some distance from his mortuary temple whose scanty remains lie south of the east end of this part of the cemetery. So, the method of coucealment for the royal burial, by separating the tomb from the funerary temple, did not appear, neither in the seventeenth Dynasty nor in time of King Ahmose I.

(1) See, Davies, The tomb of Nakht, p. 30; The Tomb of Rekhmi-Rʿ p.5.

The burial-place of Ahmose I, was like that of his parentes, in connection with his mortuary temple which was a small chapel adjoined to the tomb. The burial was marked by a pyramidion built of bricks on the hill, below which there was a stela situated over the entrance of the royal tomb(1). Although none of these stelae have been earthened, yet the pyramidions built in mud-bricks are seen. The photos published plates 2,3 show the southern group at Dra-abu-el-Naga.

VI

King Kames (2) was the last nomarch of the seventeenth dynasty. He was the son of Queen iꜥḥ ḥtp, and the brother of Ahmose I, and it seems that he ruled no long(3), and that his brother Ahmose I was his predecessor. Although, there are but few indications, from Egyptian sources, about the exact position of the burial-place of king Kames at Dra-Abu-el-Naga, his tomb was one of the three last graves inspected by the committee in time of King Ramesses IX as mentioned before(4). The tomb was found intact in that remote period, but the guardians, in fear of robbers, transported his coffin, unplundered, and was interred in a pit in the gravel, not so far from his tomb. The burial-place had disappeared afterwards in the course of centuries.

It is a matter of importance to point out the position of the tomb of Kames, because the royal burial of

(1) According to the description mentioned at Abbot Pap.

(2) All discussions began by Gauthier (Studies presented to Griffith, P.3.ff) about the Horus-name of Kames, and whether there were two kings bearing the same name, had been settled now. There is only one sovereign, he is Wꜣḏ ḫpr Rʿ-kꜣms.

(3) Although king Kames died early, yet the recent discoveries proved that he was the actual pharah who commenced the real wars against the Hyksos, those foreign conquerers who exercised dominion for centuries and whose supreme extended uptil Thebes. Long wars were necessary to expel the invadors and Kames succeeded in defeating them at Nefrouse in the Middle Egypt. This helped Ahmose to continue the wars and to get rid of the Hyksos within four or five years of severe struggles.

(4) Abbot Pap. pl. 111, line 12; Breasted, A.R. IV, 519.

his young brother Ahmose I may be in vicinity. This leads us to suppose that the grave of Kames lies near the Southern end of Dra-Abu-el-Naga cemetery. Our supposition can be accepted, because it is based on the following finds which were discovered in the site :-

a. A small pyramid, the symbol of the seventeenth's dynasty burials, is built in bricks over the hill in this supposed place (1).

b. The well-known tablet depicted in heiratic and which was discovered by Carnarvon. This tablet, which deals with the struggle between the Egyptians and the Hyksos, had been found in a tomb which lies 150 meters afar of the small pyramid(2).

c. In another tomb, beside the one in which the tablet was discovered, a scarab, fixed in a golden ring and bearing the name of Kames, was found(3).

Bearing in mind the facts mentioned above, we shall not fail to remark the position of the first mortuary temple constructed on the Theban Necropolis, and which lies at the extreme southern part of Dra-Abu-el-Naga cemetery(4). The choice of the site on which the mortuary temple was built in the time of King Amenhotep should have depended on fundamental reasons based mostly upon the positions of the ancestors' burials. This fact agrees with the information recorded by the committee which inspected the tomb of Kames, on pl. II of abbot Papyrus. We read through the inscriptions that the tomb of this King is to the north of King Amenhotep's temple.

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(1) J.E.A. X. p. 262.

(2) J.E.A. III. p. 95-110 & ibid V.

(3) Newberry, Scarabs, p. I. XXVI, I.

(4) The temple was discovered by Carter in 1896; See, Carter, J.E.A. vol III, p. 147 It is interesting to mention also that Amenhotep built another small temple on the area occupied now by the Deir-el-Bahari Temple; See, Winlock, Excavations at Deir-el-Bahari, P. 113 & 208. This small temple was removed by Senmut, the architect of Queen Hatshepsut, and bricks bearing the name of Amenhotep and his mother Ahmose Nefertari, were found in the site. We are not going to discuss here, the question of Amenhotep's tomb and whether it is at Dra-Abu-Naga as Carter stated, or in the valley of Kings as Weigall supposed.

VII

Is the burial of Ahmose I, so important to be discovered ? or does the tomb deserve these efforts and investigations which should be done to point its position on the Theban Necropolis ? and what we expect to find in his burial-chamber ?. These questions jump to the minds of the excavators before treating any actual soundings in the site chosen, especially when knowing that they are looking for a burial, empty of the royal mummy. Indeed, the mummy with its outer coffin had been found at the Deir-el-Bahari's cachet, but none of the funerary furniture had been discovered. One can add also, that the museums and the private collections are bare of Ahmose's monuments which, as I believe, are kept in his sepulchral-hall uptil now.

A King like Ahmose I, who got rid of the Hyksos after five years of struggle, who subdued the foreign countries either in the East or in the South, who ruled over Egypt for more than twenty two years, and who had enough time to receive the tributes which levied on the vanquished, year after year, should certainly had the sufficient treasuries to furnish his burial-place with suitable equipment which should agree with the richness and fame of Egypt.

The inscriptions left by King Ahmose I on his stela erected in Karnak, give us the proofs that Egypt enjoyed luxury during the last years of his reign at least. We read that this pharaoh had forwarded a great quantity of vases, jugs, amulets, rings and statues ; all of gold, silver, and lapis-lazuli to the domain of Amon's temple at Karnak.

Accordingly, we dare to say that the precious royal furniture and the belongings of the king deposited in his burial chamber, had never been touched since the mummy was transported to the Deir-el-Bahari's cachet, especially when we bear in mind that the Egyptians deified

Ahmose I, and that they considered him as a god who could do the miracles(1).

Concerning the few monuments bearing the name of Ahmose; I give here an account of them :-

a. An alabaster vase, kept now in the Egyptian Museum(2).

b. A toilet-vase of blue faience, hawk-headed shaped and kept also in the Egyptian Museum(3).

c. Some scarabs distributed among the museums of Louvre, Leiden, Turin and the British Museum(4).

d. A granite ushabti-figure, exhibited in the British Museum(5).

e. A small limestone statue in Turin Museum(6).

f. A copper adze-head bearing the throne name of the King engraved on one side of the haft(7).

When examining the above objects, we find that they are all mere gifts granted by the pharaoh to some of the favourite officials, and that they can not be considered as royal furniture kept in the grave. Meanwhile, there, had been discovered other jewels bearing the name of Ahmose I, These jewels, which were found with the mummy of his mother, Queen iꜥḥ ḥtp are : a scarab, a chain, three anklets, an armlet, a golden axe and a dagger.

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(1) Legrain, Ann. du Serv. XVI, p. 161.

(2) Mariette, Catalogue de Boulaq, 6*ème* ed., 536.

(3) Mariette, Monuments, p. 52.

(4) Gauthier, L. R. 11. p. 179-180.

(5) Budg, History, 111. p. 185

(6) Orgarti, Cataloge Illustrate dei Monumenti Egizii del R. Museo di Torino, 11, p. 721 & No. 39 et. Regio Museo di Torino, 1.p. 412 No. 3032.

(7) It is in the collection of Mustaki at Alexandria, bought at Luxor and said to have been found in the neighbourhood.

One can accept the explanation given by Winlock when discussing the reason of keeping such jewels bearing the name of Ahmose I, with the mummy of Iꜥḥ htp;(1) and that these precious jewls had been forwarded by the King on the occasion of his mother's death.

VIII.

After the discussion offered through the previous chapters, and after I have pointed the position of the royal burial of Ahmose I, and that the graves of the nomarches of the seventeenth dynasty uptil that of Ahmose, appear to be arranged in order through the ravine of the Dra-Abu-el-Naga cemetery, from north to south; I have to add, that if my suggested interpretations are correct, the actual opening of the royal tomb must be well-hidden now, and that its existence is impossible to detect easily, as there are no visible traces after the disappearance of the mortuary chapel adjoined.

There is a chance for the discovery of the King's tomb, if the work, which should be done, is well-organized in order to investigate and to examine every yard of the pointed promising area. The efforts ought to be done in order to gain the prolific results, need hard work, patience, and at last the fortunes of the explorers.

I have to draw the attention of the excavators also to a tomb which lies on the extreme end of the southern part at Dra-Abu-el-Naga cemetery, not far south of the bay of Deir-el-Bahri(2). This tomb, called Bab ibn Soliman, was discovered by illegal digg ng, and those who dug the earth and stones which once blocked the doorway of the burial, had died of asphyxia on the 11*th* November 1905. The excavators, the whole family, who occupied the house in front of the tomb, forced their way into the passage of the tomb, one after the other;

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(1) J.E.A.X, p.254.

(2) Weigall, Ann. du Serv. VIII p. 2

but no body returned. The representative of the police with the ex-Omdeh of Qurna and the inspector of antiquities, came up to the tomb, entered it, and tried to look for the dead, but the air was foul and they could not advance more in the galleries of the tomb. The entrance was blocked by the police; and the ancient tomb was regarded as the modern grave of the dead excavators.

The important points in this case are :

a. The position of the tomb as I mentioned.

b. The brief description of the tomb reported by the inspector of Antiquities of Qurna[1].

He stated that the doorway led to a passage three yards long or so. Then, the passage turned sharply to the left, then almost immediatly to the left again. It turned slightly to the right after that, and once more to the left where it opened into a big hall supported by rough columns.

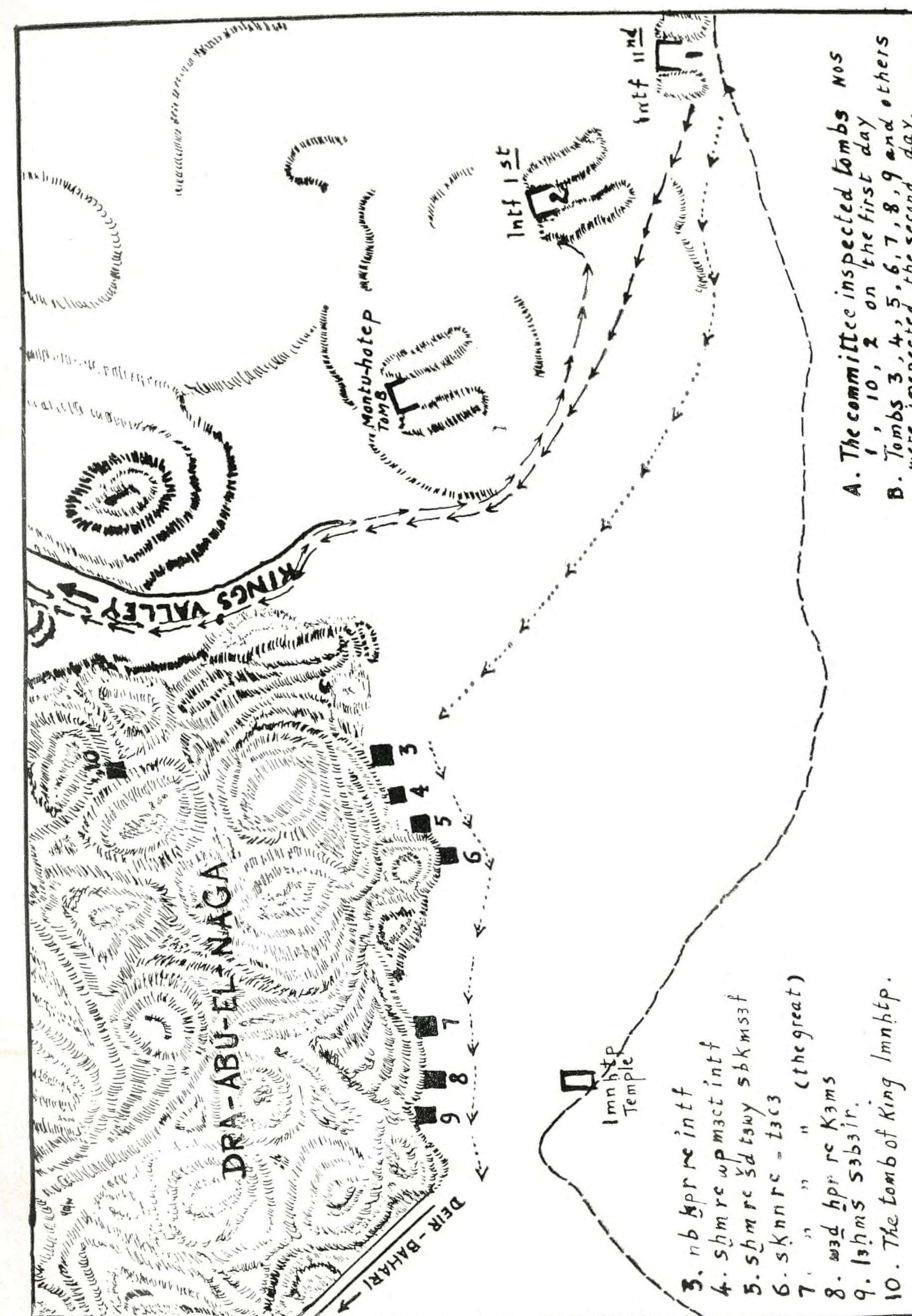
According to this description, it appears that the tomb is either a royal burial for one of the seventeenth Dynasty nomarchs, or, at least, a Saite-period tomb. The first supposition seems to be more agreable than the second, because the Dra-Abu-el-Naga cemetery had not been chosen as a burial place for the officials of the 26*th*. Dynasty, who prefered the district of El-Khokha of the Theban Necropolis. The only exception at Dra-Abu-el-Naga is the tomb-chapel No. 160[2] which dates to the Saite-period. The owner is B3S3 n mwt, the great royal scribe, the hereditary prince, the bearer of the seal of the King of Lower Egypt, the unique friend and the beloved. Yet we have to bear in mind that all the private tombs at Dra-Abu-el-Naga date to the New Kingdom.

IBRAHIM KAMEL.

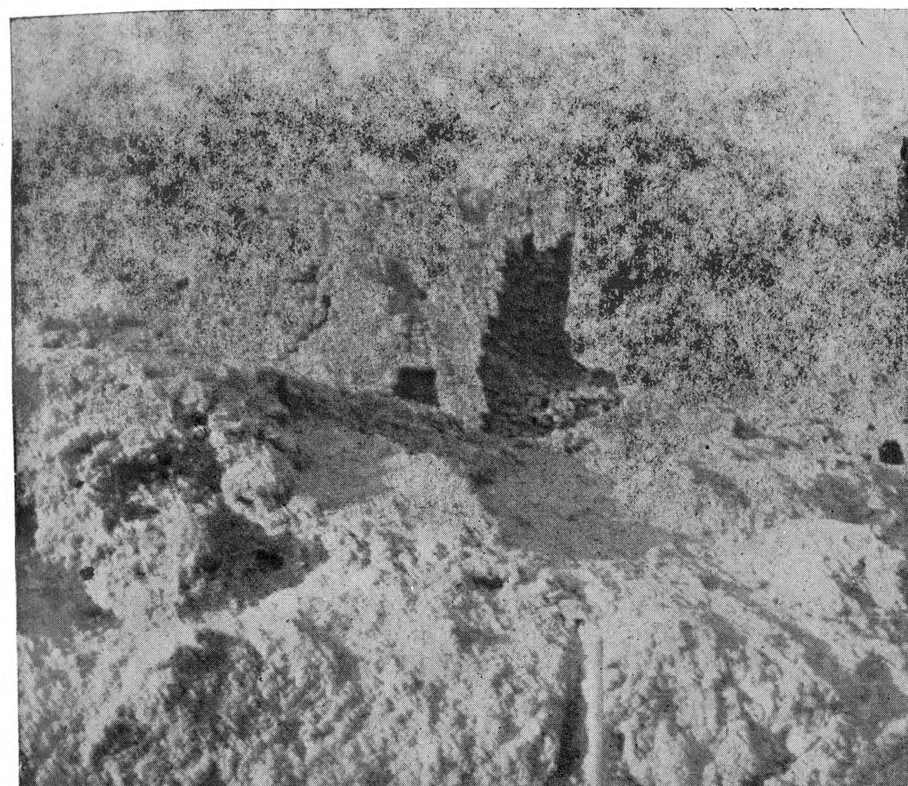
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(1) Weigall, Ann, du. Serv. VIII. p. 3.

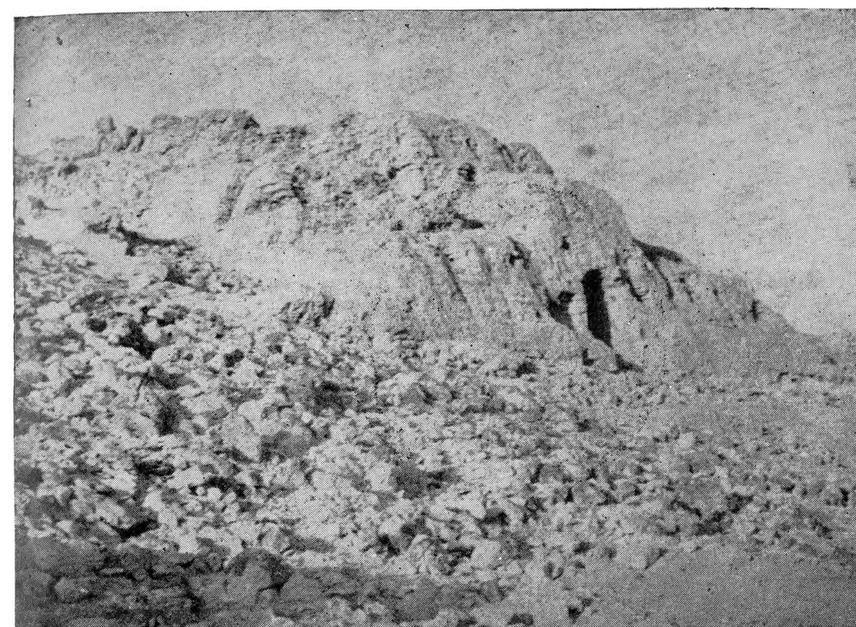
(2) Its position on Maps is D 6 C 1.



Pl. II



The Southern group at Dra-Abu-el-Naga. See p. 125



The Southern group at Dra-Abu-el-Naga. See p. 125

AUSTRIAN EXCAVATIONS IN THE DISTRICT OF SAYALA LOWER NUBIA, U.A.R. REPORT OF THE THIRD CAMPAIGN 1963/64

BY

K. KROMER

GENERAL

The third campaign of the Austrian excavations in Sayala was carried out between November 18, 1963 and January 29, 1964. The staff of the Expedition 1963/64 consisted of :

Dozent Dr. Karl KROMER, Assistant Professor at the University of Vienna, Head of the Prehistorical Department of the Museum of Natural History in Vienna, Director,

Dr. Johann JUNGWIRTH, Curator of the Museum of Natural History in Vienna, Department of Anthropology, Paleo-Anthropologist and Assistant Director,

Cand. phil. **Manfred BIETAK,** archaeologist,

Cand. phil. **Reinhold ENGELMAYER,** archealogist.

Stud. techn. **Adelio ESPINOSA,** architect,

Stud. med. **Klaus EHGARTNER,** draughtsman, and **Fathy ʿAFÎFÎ BADAWY,** UAR Antiquities Department inspector to the expedition.

The same native workers from Kuft were employed for the third time under the leadership of Rais ALI SADÎQ, consisting this time of the Rais, 15 foremen and 30 basket-carriers. Originally, the season was planned to last about two months, during the campaign, however the UAR Antiquities' Department and the Centre of Documentation in Cairo requested the Austrian Mission

to extend their investigations beyond the former boundaries in the northern direction for ten to fifteen kilometers. The new northern boundary was fixed with Khôr Ikhmindi (West Bank) and Abu Sana (East Bank), near Maharraka Shark. Thus the Austrian team links up now with the teams of Russia and Italy.

In order to carry out the survey work in the newly allotted district and to record the rock engravings and hieroglyphic inscriptions, it was necessary to extend the campaign until the end of January 1964, thus giving it two months and a half.

During the season the Austrian team received the visits of H.E. The Under-Secretary of State Abdel MONEIM EL SÂWY, H.E. The Under-Secretary of State and Director of the Antiquities Department, Dr. Anwar SHOUKRY, and the Director of the Documentation Centre in Cairo, Dr. Mohamed Gamâl el-Din MOKHTÂR

PROJECTED AIMS

As in the previous years the expedition in Sayala followed three aims :

1. Finishing of the survey work in the original Sayala District (Northern part, West Bank). Extension of the survey work in the newly allotted area on both banks of the Nile, ten to fifteen kilo meters to the North.

2. Excavation of an extensive Coptic settlement. As the weight of rising water within the reservoir will have considerably gained by October 1964-the water is supposed to mount six metres by that time those sections of the Coptic settlement facing the river had to be entirely excavated during the third campaign. A fortress belonging to the settlement, and two churches situated on a rocky plateau, will have to be left for another season's examination.

3. Excavation of a Coptic cemetery, and the collection of human remains.

SCIENTIFIC RESULTS

Survey Work

During the survey in Khôr Abu Bakr some relatively old sites were unearthed. Pan Graves were found within a small cemetery, contemporary with the Second Intermediate Period (about 1700-1600 B.C.) (Pl. I) and a settlement of the early C-Group, contemporary with the First Intermediate Period - (about 2200-2000 B.C.). The Pan-Graves were specially rich in finds. These consisted mainly of decorated pottery (Pl. II) beads and bracelets made from shells (Pl. III).

The lay-out of the C-Grop settlement was round and only the lower parts of buildings were still in good condition (Photo No.4) (Pl. IV). Within a big round stone circle were found irregularly arranged smaller stone circles, the remains of huts. Inside the bigger outer circle numerous fire-places were discovered, and here were found most of the smaller objects (Pl. V) decorated pottery, animal bones, and stone implements. Mud lumps with complicated seal impressions, found within reach of fireplaces, seem of especially great value (Pl. VI).

In the newly allotted district the recording of rock engravings and hieroglyphic inscriptions was completed. Among them were found numerous dynastic inscriptions but the bulk of the rock pictures date back to pre-dynastic and early dynastic times. Especially striking were representations of giraffes, led on ropes by men (Pl. VII).

On the higher level sections of the area cemeteries were found; these are still to be excavated in the season to come and are full of promise with regards to finds.

2. **The Coptic Settlement**

The centre of this campaign's interest, however, was a Coptic settlement on[1] the west-bank, opposite the

(1) Already mentioned by Lepsius, *Denkmäler* V, S.82, and by U. Monneret de Villard, *La Nubia Mediovale*. Service des Antiquités de l'Egypte, Mission archéologique de Nubie 1929-34, Cairo 1935, Vol. I, p. 77 ff.

former post-station of Sayala. To it belongs an unfinished fortress, built on a rocky plateau. Within the area enclosed by the fortification walls of stone are the remains of a church jutting out of the sand, while a second church lies about 70 metres to the west of the fortress, in the desert. On account of its high level situation, these buildings were neglected this year and the excavations were devoted to the settlement proper hidden by a steep sandslope descending from the rocky plateau to the River Nile. With the exception of a few traces hinting at a hidden settlement, everything there was covered by a huge sand dune. Within an area of about fifty square metres ? remnants of mud-brick-walls were excavated that had been hidden under sand layers of up to four metres in height (Pl. VIII). These walls permitted a well-planned construction to be recognized. A main path led in an East-West direction (Pl. IX) to the rocky plateau with the two churches (see app. 2) The rooms are regularly arranged at the two sides of this path, and are in obvious relation to it. The walls were fairly well preserved and could be unearthed up to a height of four and a half metres (see app. 3). Most of the rooms were roofed with mudbrick-vaults, while a few showed woodbeam-roofing. In the western part of the settlement a small storeroom yielded especially beautiful finds in pottery. The eastern part of the settlement (towards the Nile) proved to be of a higher technical finish and showed interesting points in its architectural construction (Pls. X — XII). The rooms were paved partly with burnt bricks, and partly with stones. The door-frames consisted of big worked stone pillars (Pl. XI), sometimes ornamented with engraved pentacles, obviously bearing an apotropaic meaning (Pl. XIII). Of special interest are two rooms in the middle part of the structure (Room II/i and Room III/f) They are connected with each other by a small vaulted corridor, subcrossing the main path. This actually forms the only access to Room II/i from where a stone staircase leads only to the formerly vaulted roof (see app. 2 and Pl. XIV—XVI) Room II/i measures eight and half by three metres and shows a Coptic inscription on its East wall, painted in big letters Also the connected Room II/f shows

decorations of the same kind as on the plastered walls. No doubt, these two rooms form the most important part of the excavated settlement.

As a whole the settlement yielded an astonishing amount of finds (Pls. XVIII - XXV), such as : storage vessels containing dates and grains, a small vessel containing still well-preserved salt, painted Coptic pottery very often decorated with Christian symbols or names, bronze fragments of mirrors and plates, small bronze vessels, a bronze censer, lamps made of clay or bronze, numerous whole glass vessels, decorated seals, material and leather remnants, ivory and bronze styles, glass beads, and various iron implements. Of special interest were some pottery fragments with Coptic inscriptions (ostraka), the reading of which may disclose a date and perhaps permit their dating.

On examination of the finds *in situ*, the settlement seems to date back to the 8th - 10th century A. D. During the excavations the remains of two further levels with older buildings could be noted but which were also of the Coptic period.

3. The Coptic Cemetery

In the north western part of the coptic settlement a cemetery was recognized by the tumuli of the single graves (Pl. XXVI). The rectangular superstructures built with some layers of stone slabs, were covered with sand and broken stone. To the west of the superstructures small recesses were frequently found, containing offerings (Pl XXVII)). Very often the rectangular superstructures were found to have been originally plastered and whitewashed. A total 90 graves were unearthed, yielding, 128 burials. The skeletons were mostly placed in a West-East orientation, with the head in the West. The bodies lay in an extended position on their backs (Pl. XXVIII). On account of the offerings found iron crosses, pottery, and beads. The cemetery can be assumed to have been contemporary with the settlement.

The majority of skeletons are comparatively well preserved, a certain number being in an even excellent condition. From the graves on the lower part of the slope -nearer to the water - skeletons could be salvaged with remains of skin, muscles, finger -and toe - nails as well as hair of the head, still preserved (Pl. XXIX). As they are a good indicator for racial determination, these organic remains will be a valuable supplement to the anthropological results gained from the study of the skeletons. The anthropologist of this year's team, Dr. Johann JUNGWIRTH, determined preliminarily the age and sex of the skeletons already in the field : there were 29 men, 20 of them over 40 years old and 22 women, 8 of them over 40. Infantile mortality ranked especially high (Pl. XXX): out of the 128 individuals 74 were children and juveniles This makes about 58 % of the whole amount. Fifty-six children died at the age-stage of Infants I, 9 children at the age-stage of Infants II, and the remaining individuals were juveniles.

PLANNING OF THE FOURTH CAMPAIGN 1964/1965.

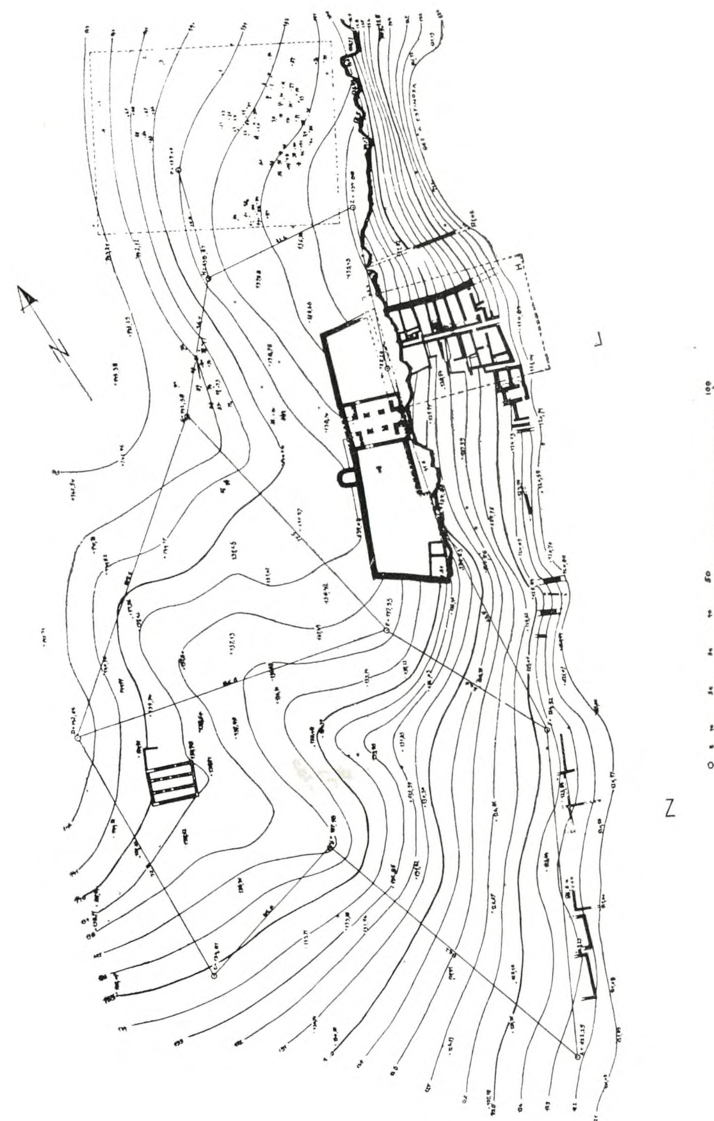
The Coptic Settlement, only partly excavated this year, excited scientific interest to such an extent that it must be given close attention during the next campaign, however little time there may be.

Though the water level in the reservoir will have mounted some six metres by Winter 1964/65, it should still be possible to excavate some of the higher level sections of the Coptic settlement, especially the fortress and the two churches.

In the newly allotted district, moreover, sites were detected that seem worthy of attention and excavation. For the fourth campaign, therefore, the following aims are being projected :

a) Continuation of the excavation of the Coptic settlement with all available means.

b) Excavations of the detected sites in the higher level areas of the new district in the North.



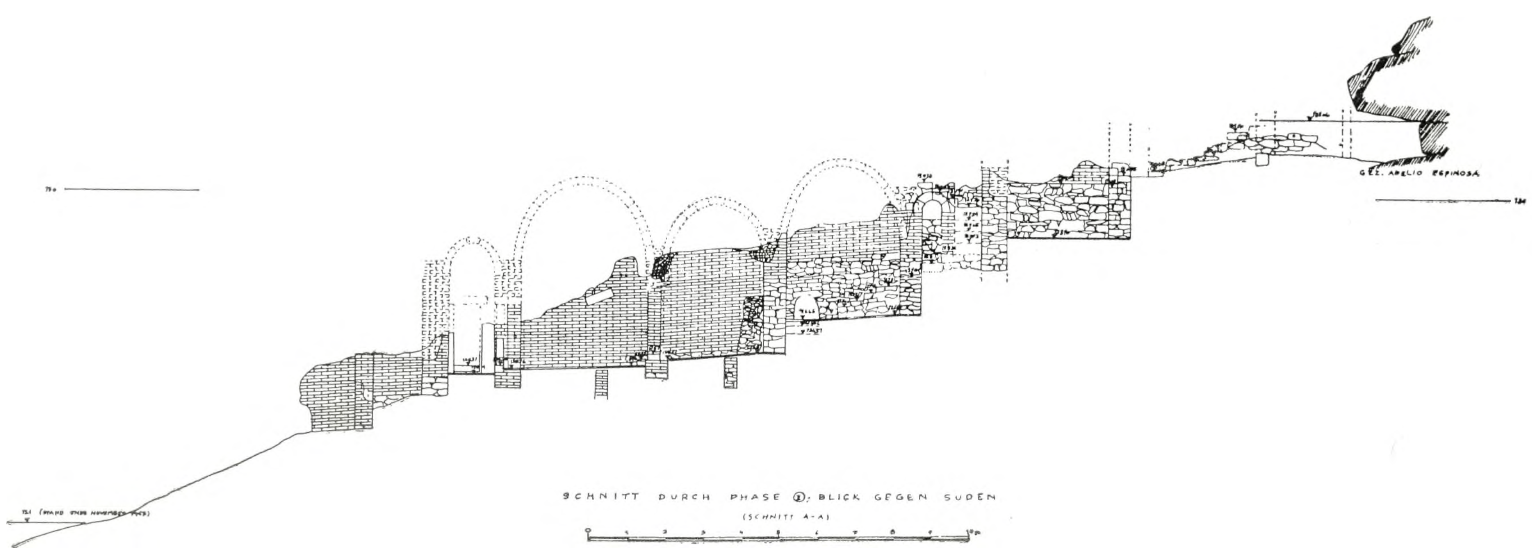
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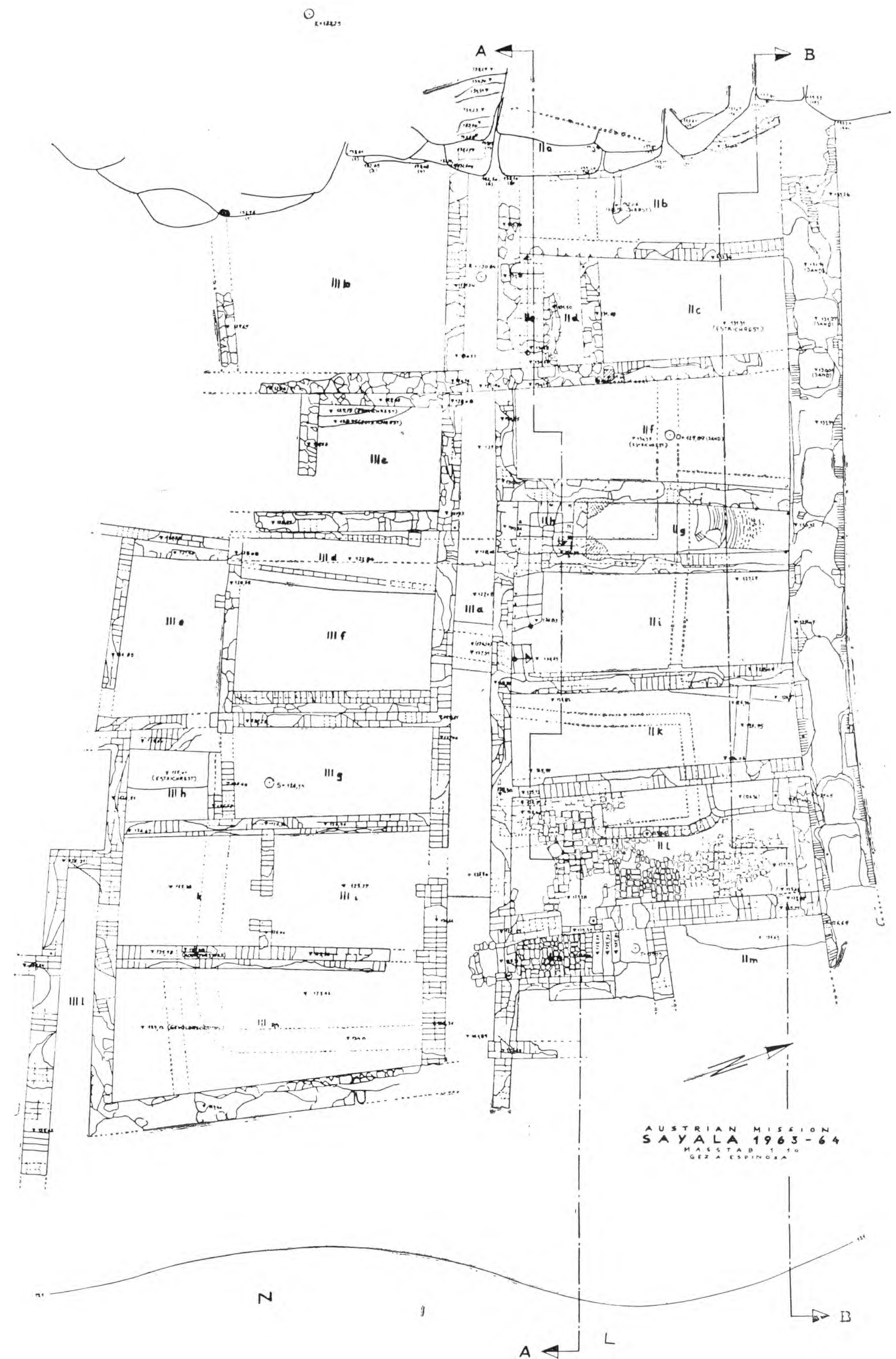
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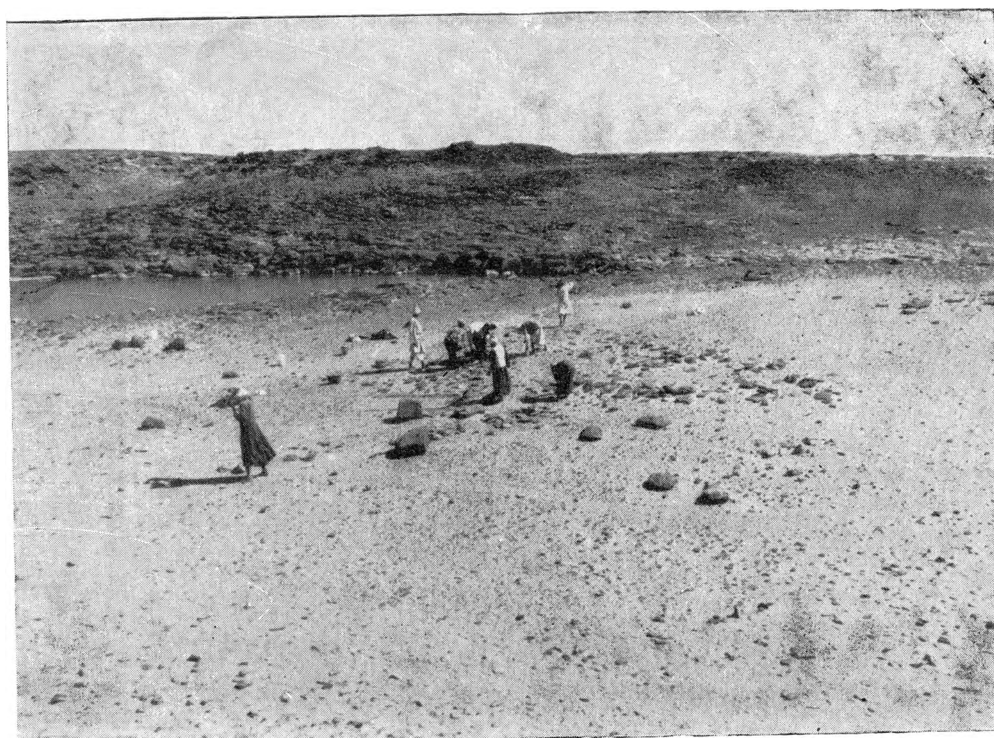
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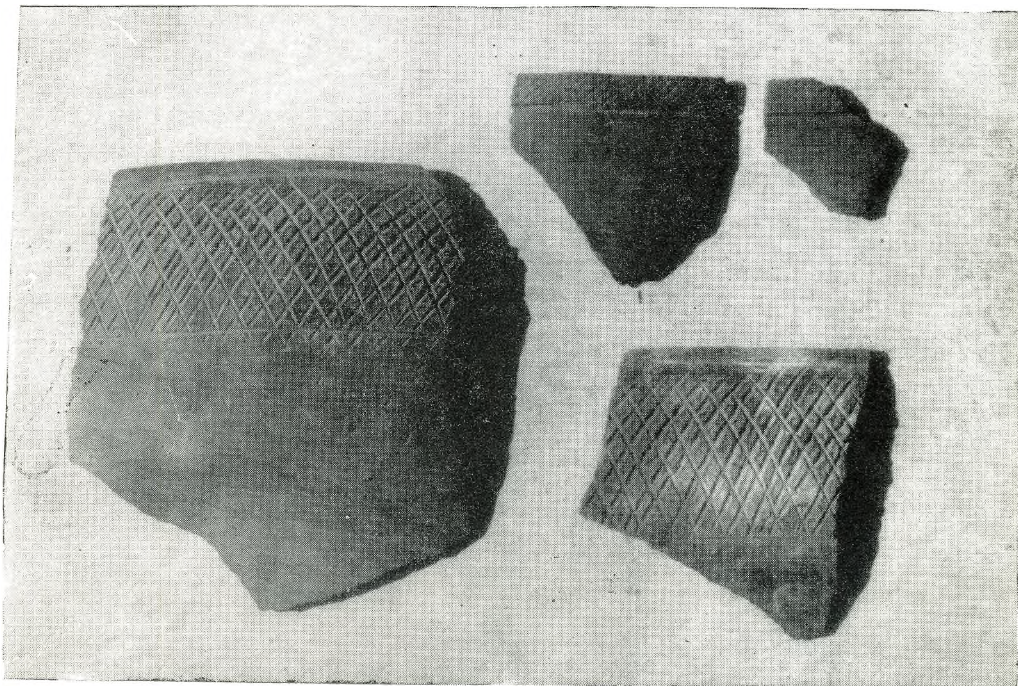
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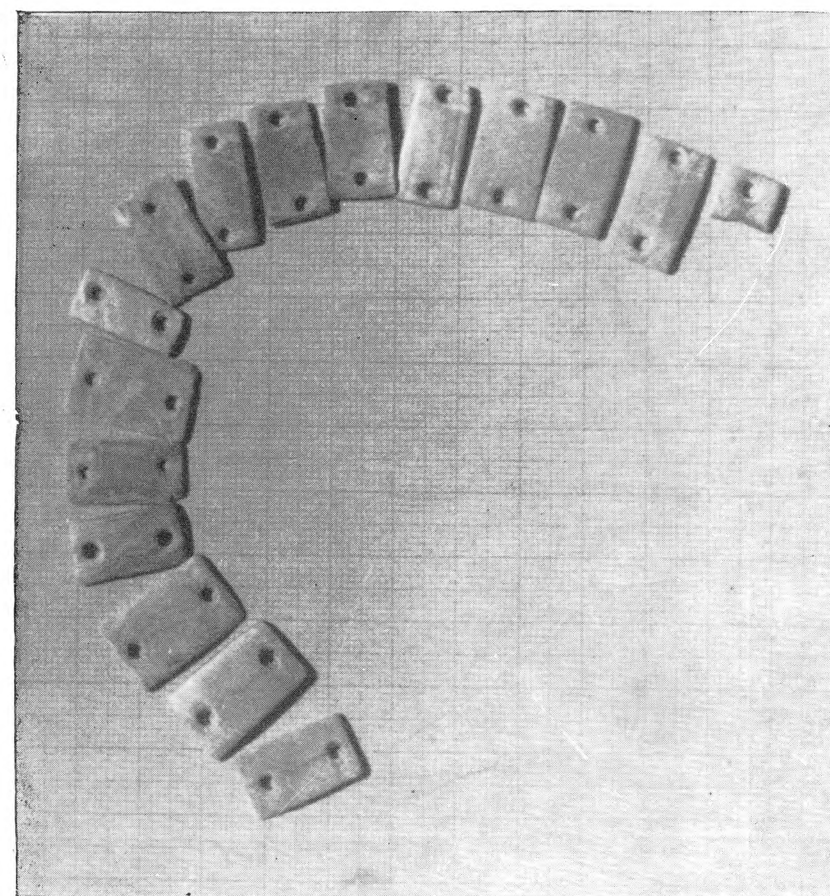


The small Pan-Grave cemetery in Khôr Abu Bakr at the beginning of the excavations.



Decorated pottery from the Pan-Graves.

Pl. II

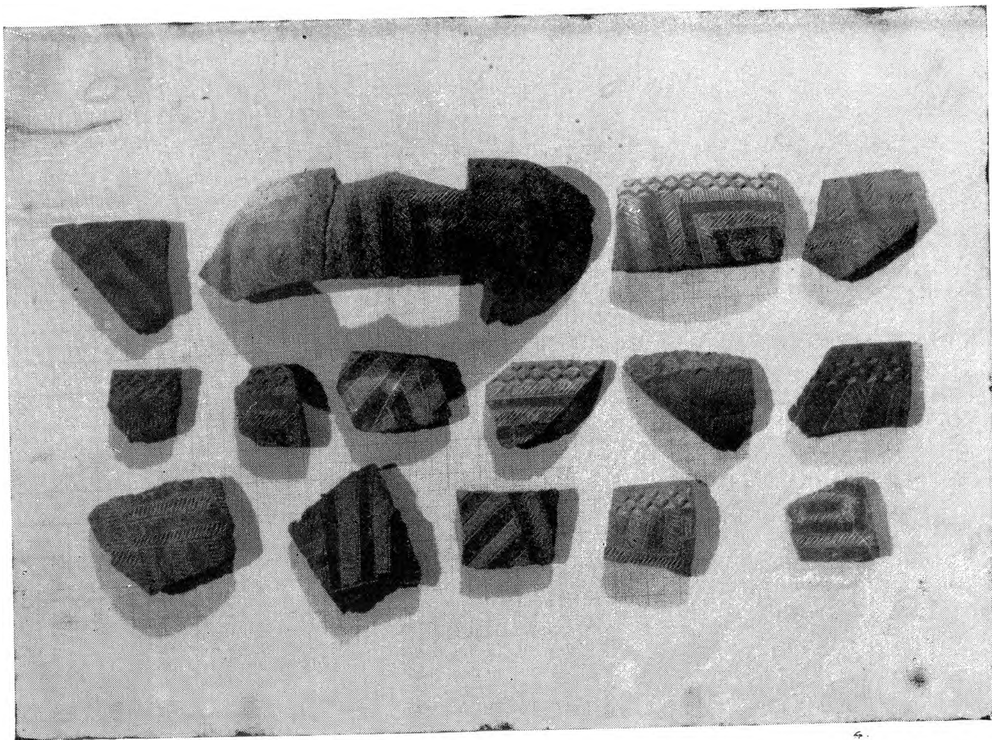


Bone bracelet from the Pan-Graves.

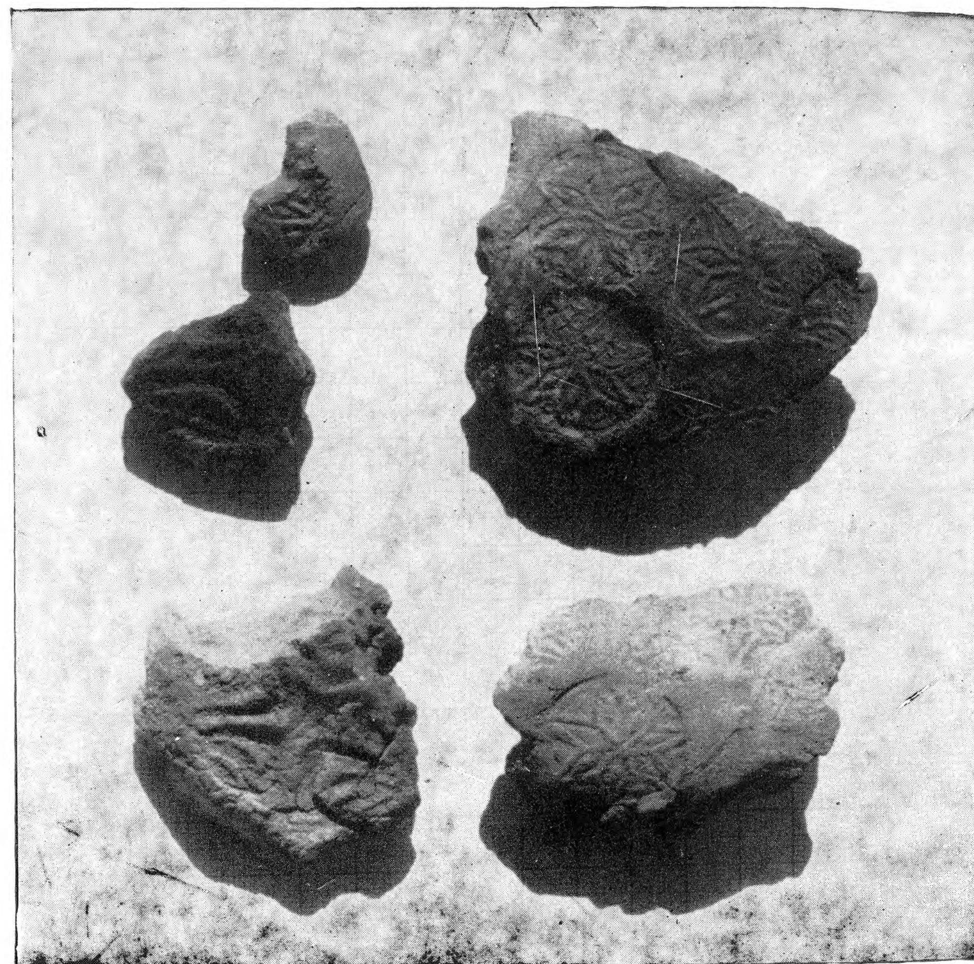


The Settlement of the early C. Group in Khôr Abu Bakr. Northern part of the outer stone circle. In the interior the stone foundations of the round huts are clearly visible.

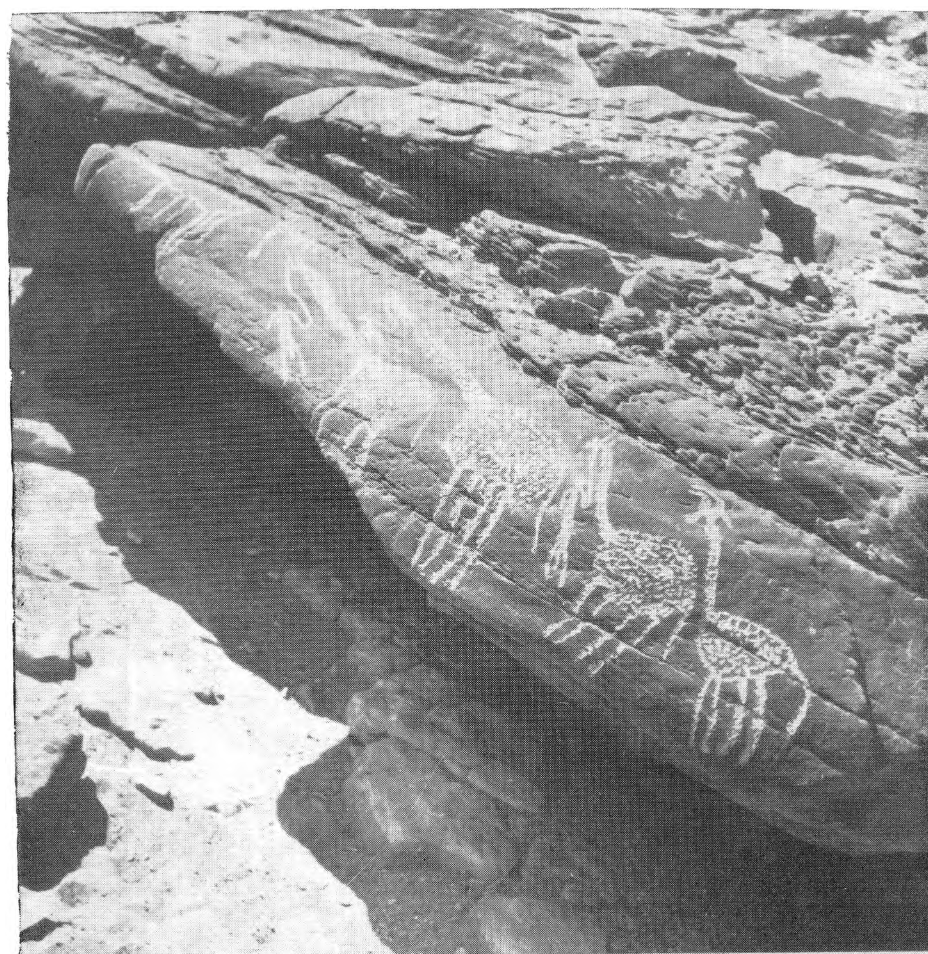
Pl. IV



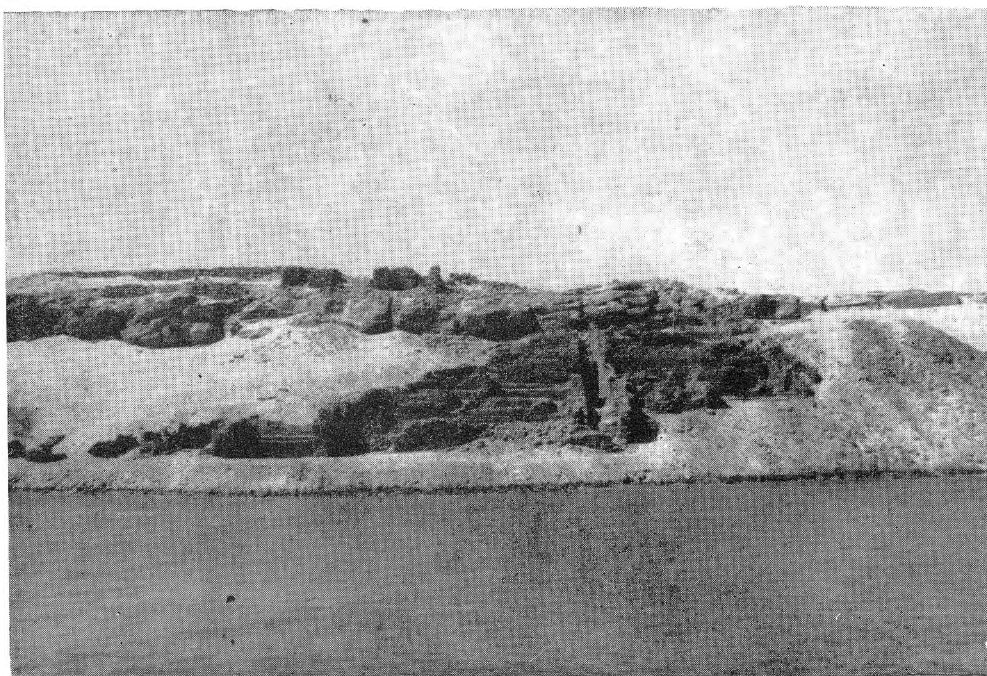
Pottery of the early C-group.



Settlement of the early C-group in Khôr Abu Bakr. Mud lumps with seal-prints, in the shape at seven pointed stars.



Rock picture position No. 26. Early dynastic representations of giraffes, led on ropes by men. The engraved lines are chalked in.



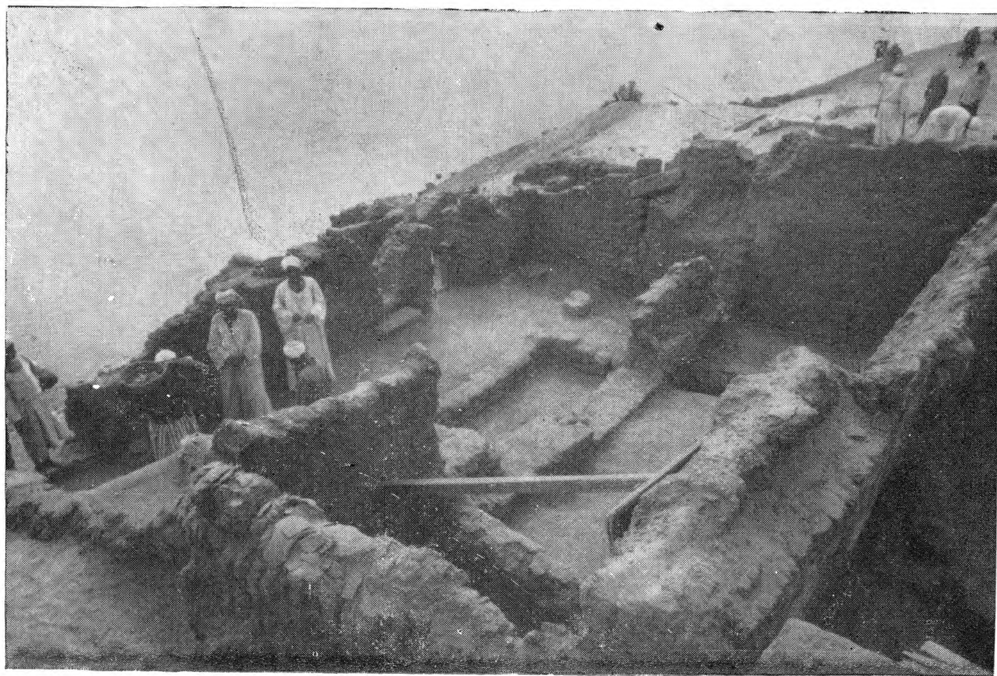
The entire excavation area of the Coptic settlement at the end of the compaign.

Pl. VIII

Pl. IX



The main path and the southern part of the site.

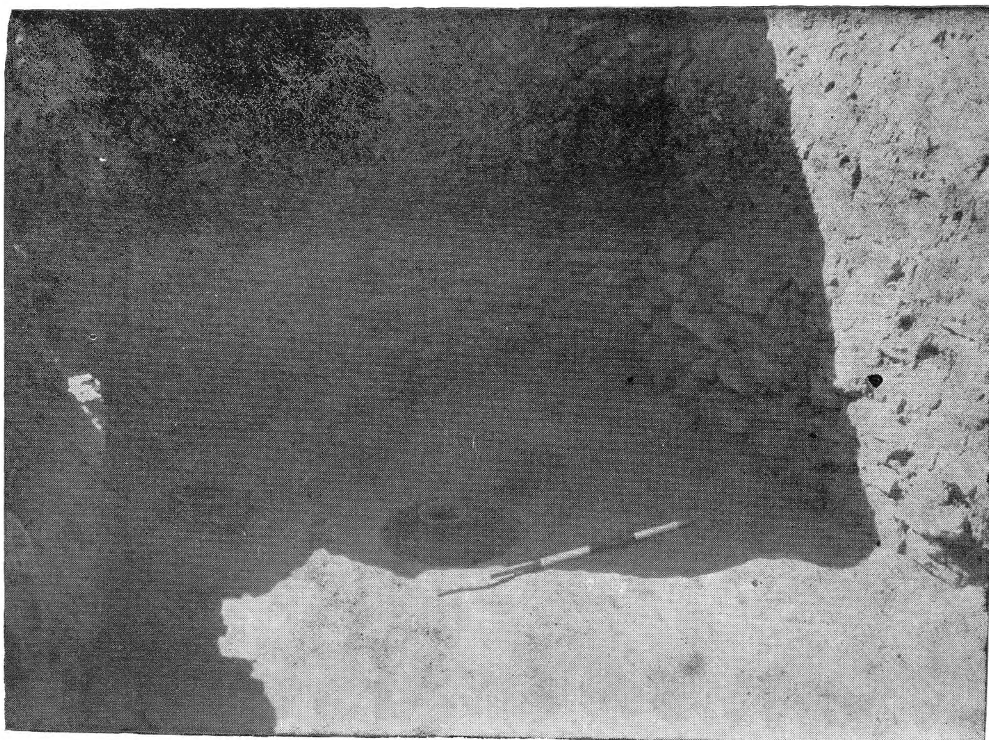


The eastern part of the Coptic settlement (Room 11/K & 11/1).

Pl. X

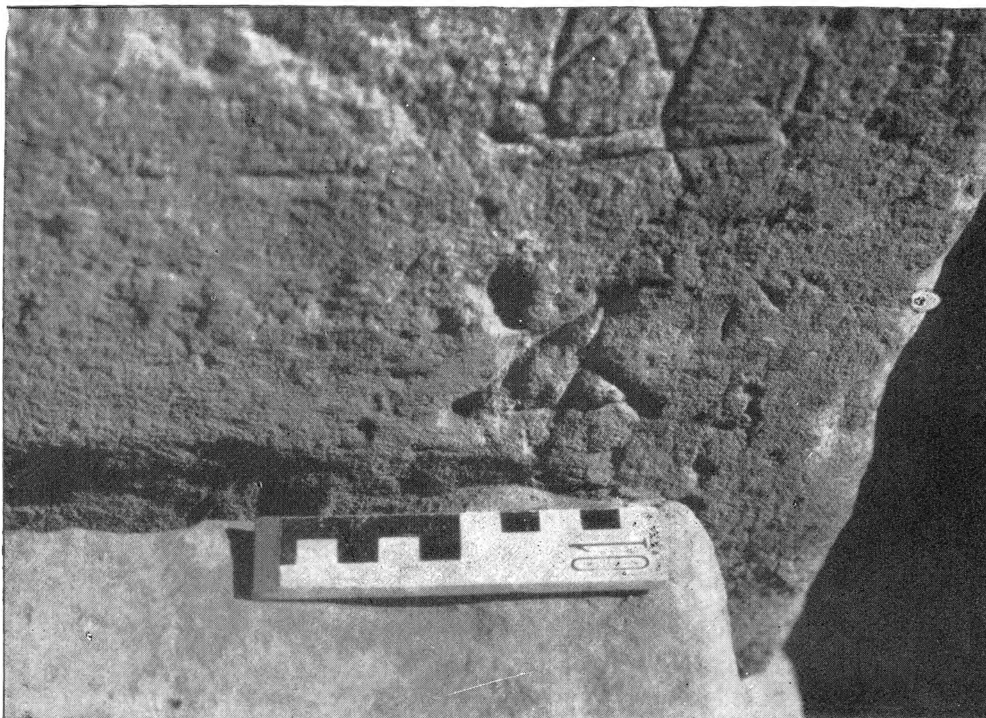


Coptic settlement, Room II/1 with stone pavement, stone steps and door-post of finely worked stones.



Room II/K, upper layers. Storage vessels set into the floor.

Pl. XII

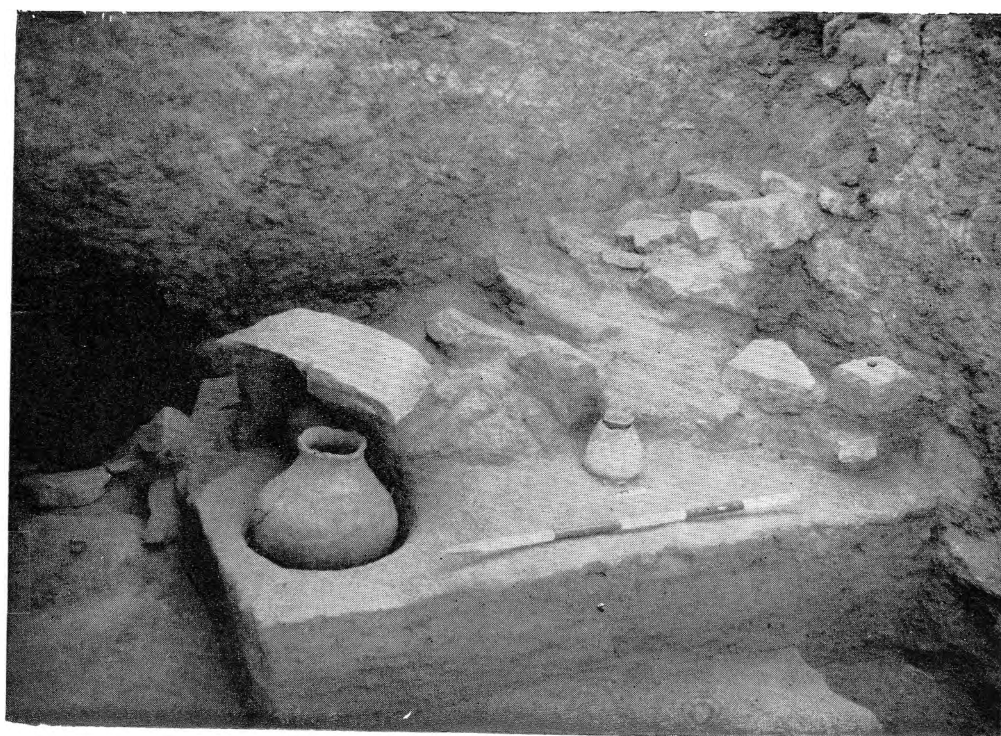


Door-post between Room II/1, and main path III/a with incised pentacle over the door-step.

Pl. XIII



View into Room II/i. On the left wall a part of the Coptic inscription is visible. In the background, the low., vaulted corridor in connection with III/f ; right of it, the remnants of the stone staircase.

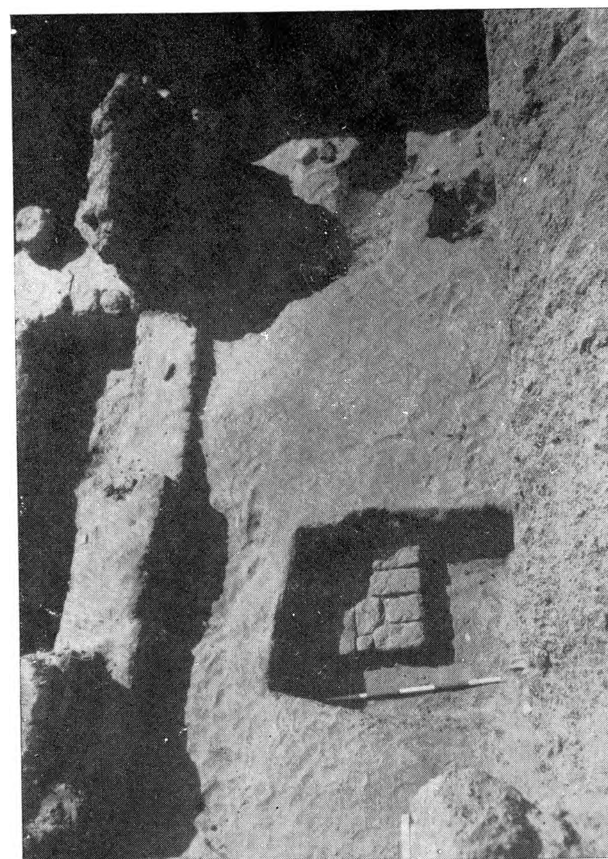


Room II/i Remnants of the stone stairecase and pottery that had been set into a later floor, left of it the low, vaulted corridor to III/f.

Pl. XV



Room II/i. The Coptic inscription on the East wall.



View into room II/k with uncovered older remnants of an earlier foundation.

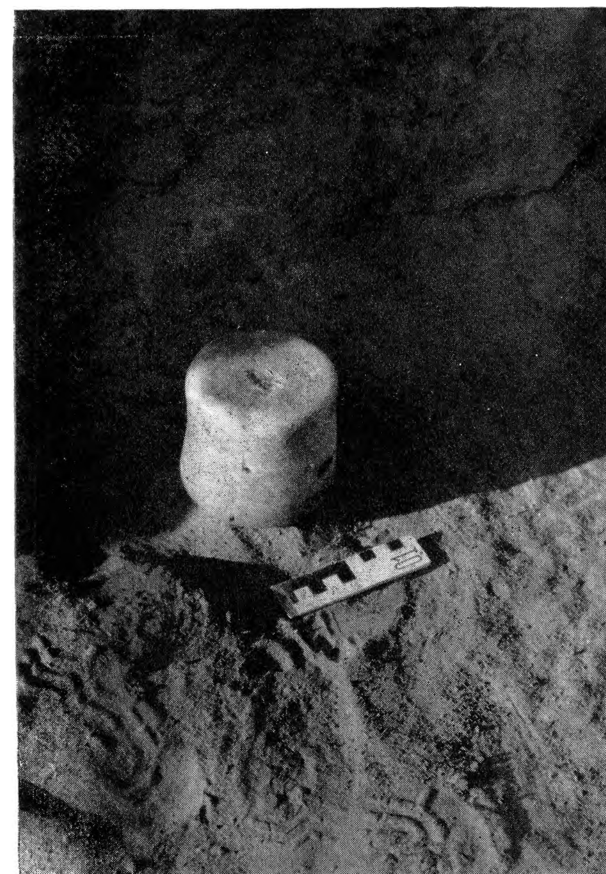


Bronze censer *in situ* in front of the door-lintel towards Room II/1.

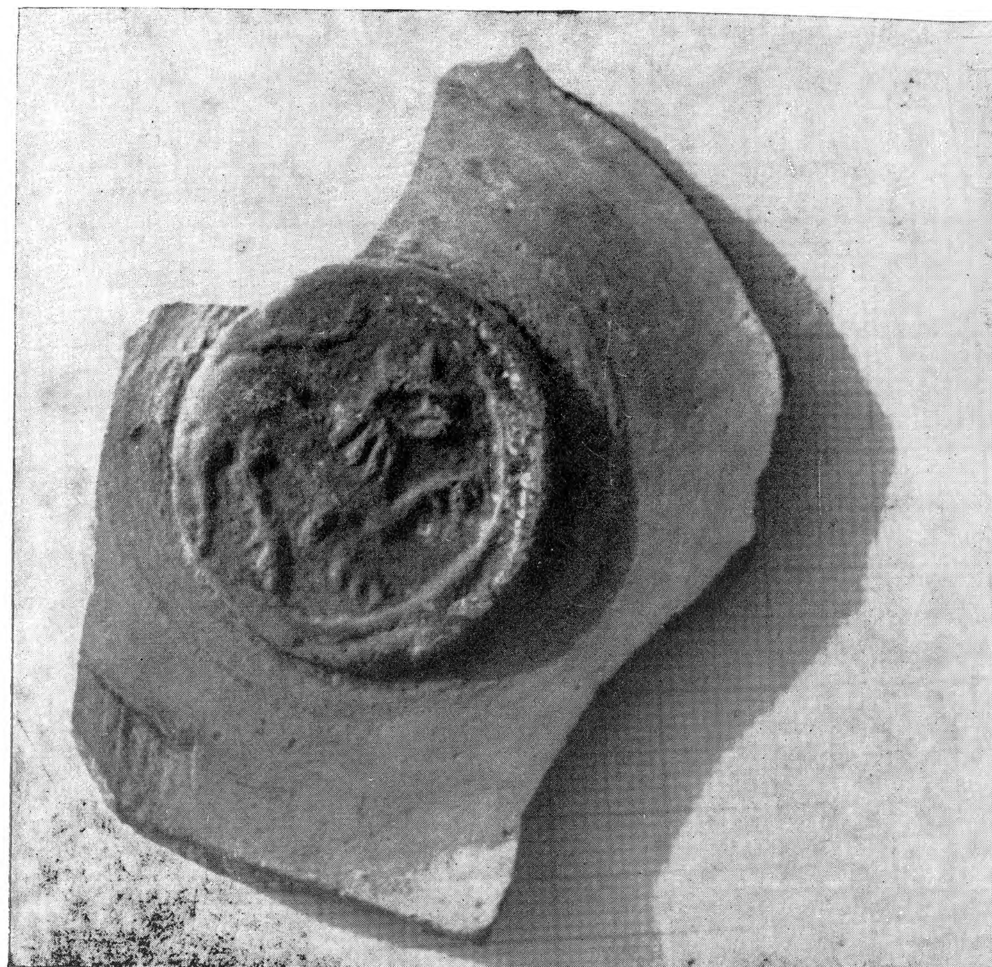


Glass vessels.

Pl. XIX



Main path III/a perfectly preserved glass vessel
in situ, mouth-downward.



Fragement of the bottom of a cup with the representation of a gryphon (somewhat enlarged).



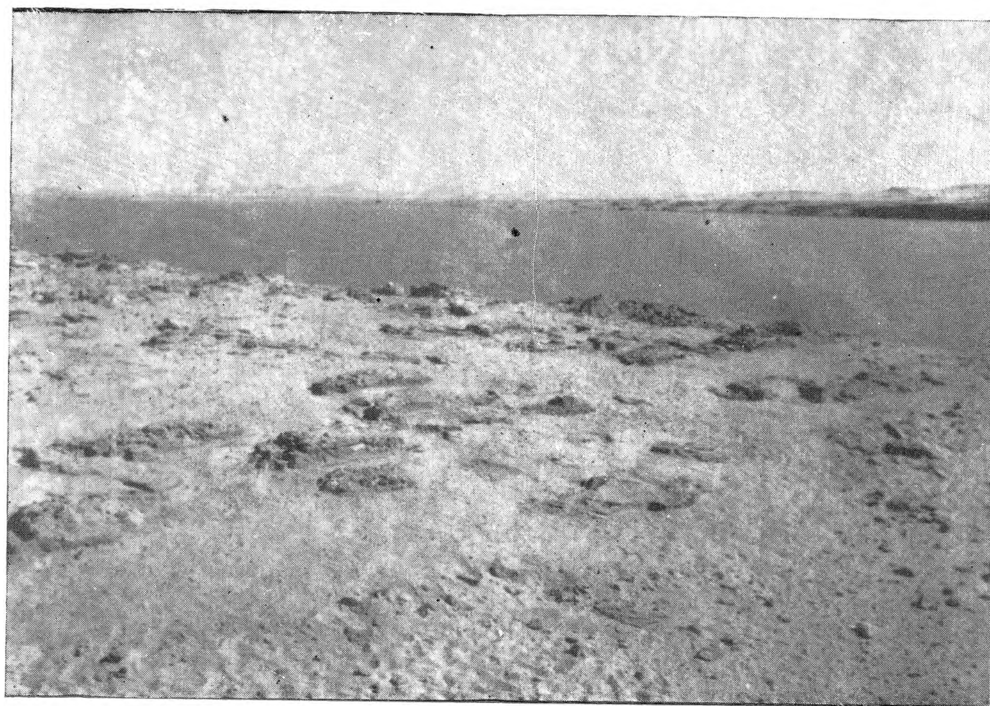
Pottery fragment with the name of "Michael" Scratched on it.



Rough ware.



Design samples of the painted Coptic pottery.



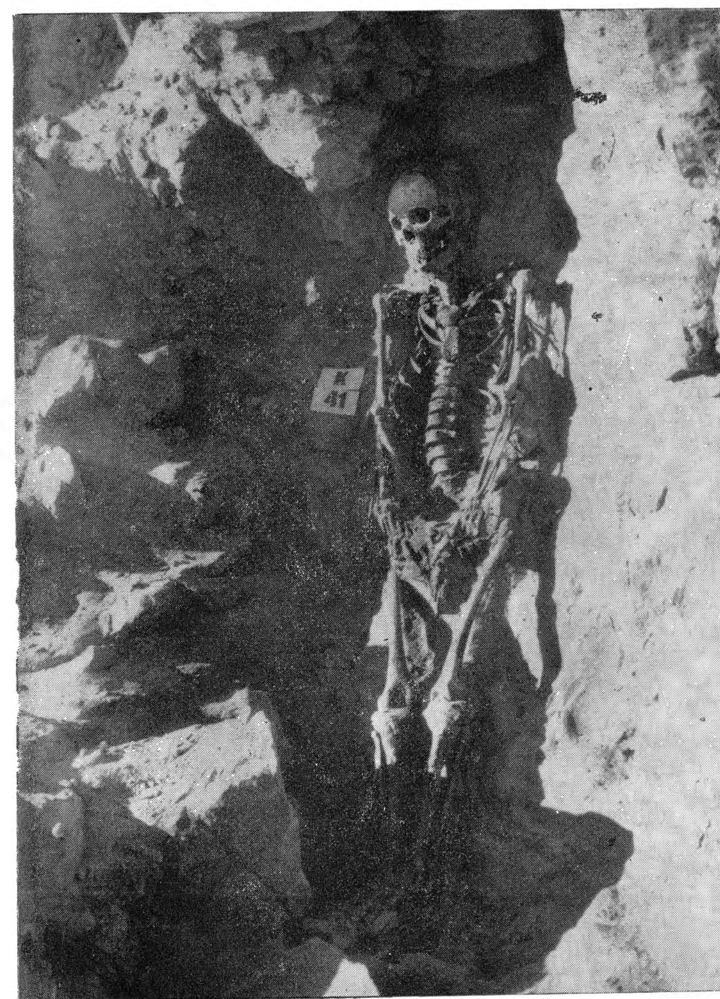
The Coptic cemetery (K) in the North of the Coptic settlement. The superstructures of the yet unopened graves already cleared from the sand.

PL. XXVI



Superstructure of a Coptic tomb ; to the west : the remnants of a small chapel with offerings nearby.

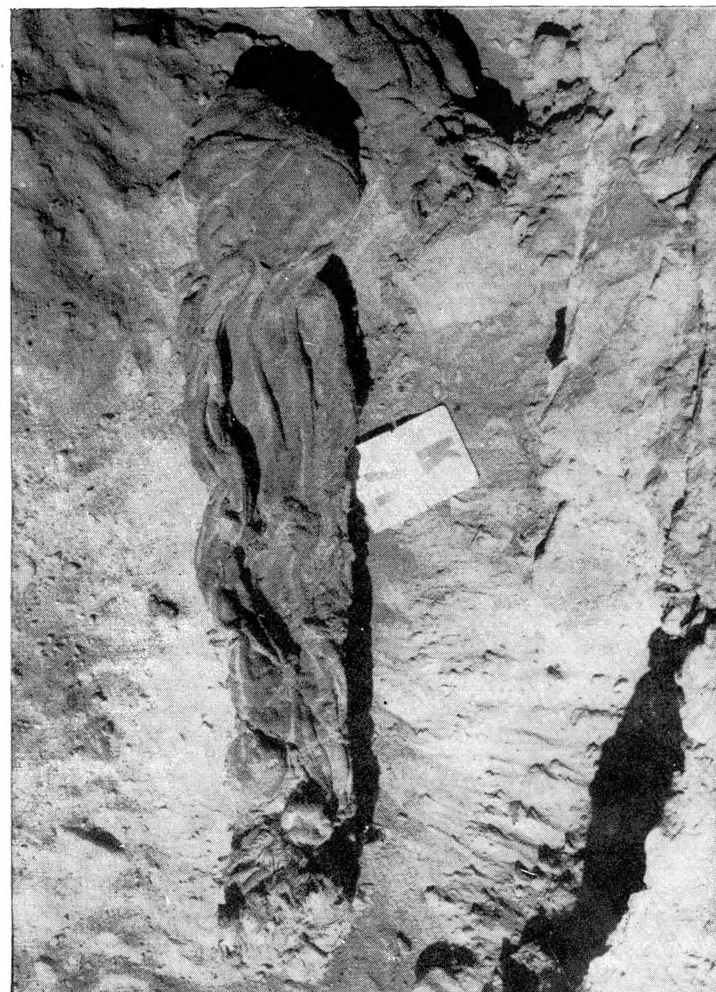
Pl. XXVII



Grave K/41, body in extended position, skull in the west.



Sample of the good preservation of organic remains within the Coptic burial-ground. Remains of skin and hair of the head still preserved. Also the left ear is still recognizable.



K/71 - Infant burial, wrapped in coarse linen and tied up with a rope

TRAVAUX ET RECHERCHES A SAQQARAH

(15 Decembre 1974-28 Mars 1975)

PAR

M. JEAN-PHILIPPE LAUER

I. TRAVAUX POUR LE COMPTE DU SERVICE DES ANTIQUITES.

Ces travaux ont été menés en collaboration avec M. Salah el-Naggar, architecte en chef du Service des Antiquités à Saqqarah.

A. *Aux monuments du roi Zoser.*

Nos efforts ont encore porté principalement durant cette campagne sur le secteur des édifices de *heb-Sed* (1).

1°) Dans la cour dite "du Heb-Sed", il restait essentiellement du côté Ouest à terminer, sur la seconde chapelle à grande niche, la partie gauche (vers le Sud) de la corniche arquée entre le pilastre d'ante et la première colonne cannelée. Au cours de la fin de la précédente campagne plusieurs éléments de cette corniche, qui avaient été exécutés trop hâtivement avant notre départ, demandaient à être améliorés ou même à être remplacés. De même, la partie supérieure du chapiteau de la première colonne présentait une mutilation gênante qu'il convenait de restaurer partiellement. Ces différentes réfections ayant pu être menées à bien, la façade principale de cette chapelle à grande niche est maintenant complète (pl. I, A et B), à part l'escalier conduisant à cette dernière,que nous avons décidé de ne reconstituer que partiellement. La butée de cet escalier étant, en effet, particulièrement apparente aux sept premières assises du soubassement de la façade de la chapelle, il est important, du point de vue archéologique, de ne pas la dissimuler. C'est à cette fin que nous avons limité la reconstruction du massif de l'escalier à ses deux premières assises sur la partie la plus proche du soubassement, et au-delà vers l'Est aux trois assises qui correspondent aux trois premières marches actuellement en cours d'exécution. Celles-ci,coulées en béton et pierre artificielle,d'après les modèles de celles de la chapelle voisine, ne pourront être mises en place qu'après notre départ.

(1) Cf. J.—Ph. LAUER dans *CRAIB*, 1973, p. 323-325 et pl. I, a.

Par ailleurs, en divers autres points de cette cour, et en particulier vers son extrémité Sud-Est, avant le point où nous avions antérieurement redressé les trois statues cariatides inachevées ou tronquées (2), nous avons poursuivi le travail général du remplacement des assises supérieures, altérées, par une assise protectrice de blocs en béton et pierre artificielle.

2°) *Au temple "T"*.

La reconstitution des différentes parois du sanctuaire aux linteaux à *djedou* (3) a été effectuée jusqu'au niveau où ces derniers devront être replacés. Cela ne pourra être fait qu'au cours de la prochaine campagne, après que les éléments retrouvés de ces linteaux auront été dûment complétés.

3°) *A la "maison du Sud"*.

Le chapiteau à feuilles cannelées (en plusieurs éléments) de l'une des colonnes de cet édifice, entreposé dans son sanctuaire à triple niche se trouvant bousculé et menacé de destruction par l'abondance des visiteurs pénétrant en ce point, nous avons décidé de la déplacer. Nous l'avons ainsi remonté derrière le massif de la façade du côté Est, où, plus dissimulé, il pourra être présenté simplement aux spécialistes.

D'autre part, une assise protectrice de blocs en béton et pierre artificielle a été disposée sur les assises subsitantes des murs bordant la cour à l'Est et à l'Ouest de la façade principale. En particulier, sur la petite façade latérale comportant en son centre la base et le premier tambour de la colonne symbolisant le Sud, un second tambour de protection a été ajouté à celle-ci.

4°) *Dans la grande cour au Sud de la pyramide.*

Nous avons entrepris de grouper et de reclasser dans la partie occidentale de cette cour, hors du point de passage

(2) Cf. J.—ph. LAUER *ibidem* p. 324-235 et pl. II a.

(3) Cf. *ibidem*, p. 325-326.

des groupes de touristes, tous les secteurs de tambours des colonnes du hall d'entrée qui subsistent encore, plus ou moins éparpillés, dans le but de les mieux préserver et de tenter d'en reconstituer quelques tronçons. Ces derniers pourraient être ensuite adaptés aux colonnes des premières travées du hall à partir de l'entrée de l'enceinte, afin de redonner en ce point l'aspect ancien de ce hall avec sa toiture imitant des rondins et ses soupiraux d'éclairage latéraux.

B. *Au complexe de l'Horus Sekhem-khet.*

Avec les moyens très limités dont nous disposions, nous avons d'abord élargi sensiblement l'entonnoir que nous avions dû aménager dans l'énorme remblai de "tafle" (marne) de 10 mètres d'épaisseur recouvrant la descenderie d'accès au tombeau Sud de cet Horus. Puis, lorsque tout danger d'éboulement eût été écarté, (pl. II, A), nous avons enfin dégagé l'entrée en tunnel, dont nous n'avions pu atteindre antérieurement que la partie supérieure. Cette entrée (pl. II, B), qui mesure 1 m,50 de largeur entre deux pieds-droits de lm, 10 à lm, 15 de longeur, était taillée à sa partie supérieure en arc plein cintre dans le roc; mais cet arc a disparu sauf à ses naissances latérales situées à lm, 75 environ au-dessus du sol de la descenderie. Après avoir disposé les étais nécessaires nous avons déblayé l'endroit sur une longueur de plus de 3 mètres à la base et de 5 mètres au niveau de la voûte détruite. C'est en ce dernier point que le raïs Abdou Créti a pu constater le passage des voleurs à travers le "tafle" du massif de terrassement, où ils durent utiliser l'un des murets de cloisonnement de ce massif. Il n'y a donc pas lieu de penser, comme nous l'avions suggéré(4), que la descenderie ait été recoupée peu après son entrée en tunnel par une galerie transversale bordée de chambres en dents de peigne, d'où aurait été tiré le "tafle" nécessaire aux travaux de terrassement et par où les violateurs auraient atteint la descenderie du tombeau En revanche, au cours du déblaiement complémentaire de la descenderie, une cavité vers l'Ouest est apparu, qui pourrait précisément donner accès aux galeries d'où l'on aura tiré l'énorme quantité de marne qui fut employée là.

(4) Cf. J.—Ph. LAUER dans *CRAIB*, 1972, p. 581 et fig. 1.

Il conviendra au cours de la prochaine campagne de débloquer cete cavité et d'effectuer, s'il y a lieu, l'exploration des galeries souterraines qui devraient ainsi s'étendre sous le massif Ouest de l'enceinte, comme c'est également le cas dans le complexe funéraire de Zoser.

II. TRAVAUX DE LA MISSION FRANÇAISE AUX PYRAMIDES A TEXTES DE SAQQARAH.

1°) *Au temple haut de la pyramide d'Ounas.*

Bien que les membres de la mission aient été à pied d'œuvre dès la mi-décembre 1974, les travaux n' ont pu commencer effectivement à la pyramide de Pépi ler qu'un mois plus tard, faute de pouvoir obtenir le concours d'un inspecteur du Service des Antiquités. En attendant cette désignation nécessaire, nous avions pu heureusement obtenir de la Direction Générale l'autorisation d'ouvrir le magasin que nous avions édifié, il y a plusieurs décennies, dans les vestiges du temple funéraire d'Ounas pour y entreposer les différents fragments de bas-reliefs provenant de ses déblaiements successifs; ceux-ci avaient été effectués par A. Barsanti tout au début du siècle(5), par C.M. Firth en 1930 (6) et par nous-même en 1937 (7). Il est, en effet, grand temps de publier ces éléments mis au jour depuis si longtemps, avec un plan détaillé de ce temple haut dont nous n'avions pu donner encore que des restitutions incomplètes ou schématiques (8). Tandis que nos collaboratrices, Mlles.C. Berger et I. Pierre, dessinaient et photographiaient les fragments de bas-reliefs, notre architecte, M. Audran Labrousse, effectuait un relevé de plan minutieux des vestiges du temple. En possession maintenant de ces documents, nous allons en préparer la publication qui devrait pouvoir être menée assez rapidement.

(5) Cf. Al. BARSANTI, *Fouilles autour de la pyramide d'Ounas* (1899—1900) dans *ASAE* I (1900) p. 149 et dans *ASAE* II p. 246-247 et seq.

(6) Cf. C.M. FIRTH, *Report on the Excavation of the Dept.* of *Antiquities at Saqqara novembre* 1929-*april* 1930), dans *ASAE, XXX*, p. 186-187 et planche.

(7) Cf. J.-Ph. LAUER, *Note sur divers travaux effectués à Saqqarah en* 1936 *et* 1937, dans *ASAE* XXXVII p. 111-113 et planche.

(8) Cf. J.-Ph. LAUER, *Le mystère des pyramides*, Paris, 1974, p. 168.

2°) *A la pyramide de Pépi Ier.*

Aussitôt M. Saïd El-Sawy, Inspecteur du Service des Antiquités, affecté à notre mission nous avons pu reprendre (le 14 janvier) les travaux tant à l'intérieur de cette pyramide qu'à l'extérieur dans son temple funéraire.

Sous la pyramide, la réincorporation très délicate, confiée au raïs Abdou Créti et à son frère Abdel Mootal Créti, des fragments inscrits dûment identifiés a été poursuivie sur la face orientale de l'antichambre, et la paroi méridionale du petit couloir reliant cette dernière au *serdab*, également couverte de textes, a pu être reconstituée presque complètement. Dans la salle sépulcrale, les mêmes raïs ont réussi à replacer de façon plus précise l'énorme fragment inscrit constituant la partie Sud de la paroi orientale, tandis que plusieurs fragments plus petits étaient réincorporés plus bas à cette paroi. Il a été procédé, d'autre part, à la finition des dalles de la voûte en chevrons, reconstituées en béton.

A l'extérieur de la pyramide, le déblaiement du temple funéraire a été étendu, sous le contrôle de M. Audran Labrousse, d'abord à la partie Nord du couloir TT'(de nos plans) (9), dont le seuil de granit de la porte septentrionale ouvrant sur la cour de la pyramide a été atteint et dégagé. A partir de ce couloir les jambages des portes de granit des magasins situés au Nord de la cour à portiques ont été mis au jour ainsi que les murs des magasins aux salles allongées situées de ce côté, qui s'élèvent à plus de 3 métres de haut (voir pl. III, A). Ces derniers, contrairement aux magasins du temple intime, ne comportent pas d'étage. Le parement Nord de la cour à portiques, dont une partie des deux première assises est encore en place, avait certainement été orné de magnifiques bas-reliefs; c'est ce qu'indiquent plusieurs très gros blocs retrouvés au pied et présentant des éléments de scènes de course du roi (voir pl. III, B) et de massacre de chefs étrangers par le pharaon. De cette dernière scène, des blocs appartenant à trois assises successives se raccordent entre eux.

(9) Cf. LAUER et LECLANT, *Le temple haut du complexe funéraire du roi Teti*. Bibl. d'Etude (IFAO) t LI p.22 et pl. XXXV.

Un fragment de bloc figurant la belle scène de l'allaitement du roi par une déesse a également été recueilli dans ce secteur, où il a pu être apporté [10] pour être précipité dans les fours à chaux aménagés dans les magasins situés tout à côté et ainsi épargnés par les carriers.

Le déblaiement de la cour à portiques a été parachevé; on y retrouve les bases en granit de ses 18 piliers. Plusieurs de ces bases qui avaient été bougées ont été replacées sous la direction de M. Labrousse. Le seuil en granit de la porte reliant le hall à cette cour a été atteint, et le dégagement du sable et des éboulis qui recouvrent ce hall a été commencé. Au total quelque 180 fragments de bas-reliefs ont été recueillis au cours de cette campagne de travaux dans le temple, ainsi qu'une troisième statue cube en fragments et malheureusement beaucoup plus mutilée que celles retrouvées l'année dernière. Cet important apport a nécessité la construction d'un nouveau magasin, qui a été accolé à l'Ouest des deux précédents .

3°) *A la pyramide de Meren-rê.*

En fin de campagne, l'équipe du raïs Abdou Créti fut transférée à la pyramide de Meren-rê, où elle s'employa à déblayer les éboulis qui séparaient encore l'antichambre de la salle sépulcrale et résultaient en partie de la destruction des deux assises de gros blocs ayant constitué les dallages et sous-dallages de ces chambres. Parmi ces éboulis plus de 200 fragments de textes provenant des parois de ces dernières ou de celles du couloir les reliant ont été recueillis, dont deux importants blocs d'angle. Tous ces fragments ont été dessinés et fichés, mais le déblaiement de l'antichambre, qui demande de délicats travaux de consolidation est encore loin d'être achevé.

(10) Au temple de Pépi II, cette scène avait été localisée par Jéquier dans la vaste niche où se trouve l'escalier conduisant à la chambre aux statues.



A



B

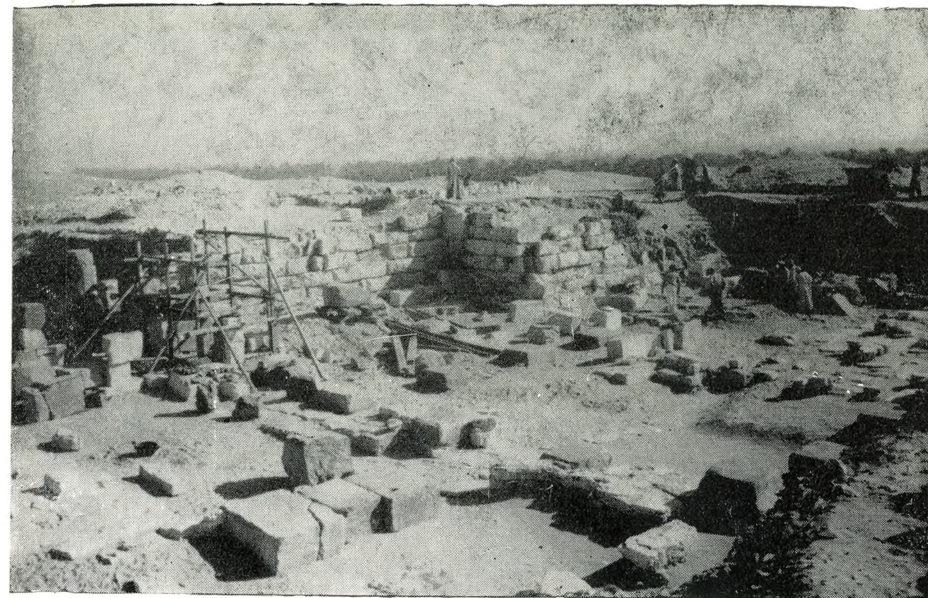
La chapelle *ḥeb-sed* à grande niche après *anastylose* et reconstitution :
A. Vue vers le Nord-Ouest ; B; Vue vers le Sud-Ouest





Tombeau Sud de l'Horus Sekhem-Khet :
A. Déblaiement de la descenderie. *B.* L'entrée en tunnel de cette descenderie.

Pl. II



A. Déblaiement du temple funéraire de Pépi 1*er*



B. Bas-reliefs de ce temple.

THE "TREES AND TOWNS" PALETTE

BY

ALESSANDRA NIBBI

Egyptologists cannot think of the areas adjoining Egypt in ancient times as lush and fertile, with many trees growing on them. The time has come to consider this view very seriously in the light of some recent scientific research to which I shall refer in some detail in the second part of this article.

We should begin by saying that Egypt is fortunate in having at Giza University a most active Botany Department under the experienced and keen direction of Professor Vivi Täckholm[2], which has built up an excellent library of journals and periodicals from all over the world. Her Department has already trained a number of experts who are putting into practice modern methods of research which are making a substantial contribution to our knowledge of the flora of Egypt and the surrounding regions, thus illuminating our information about surviving ancient plants as well[3].

It is to Professor Täckholm that we owe the careful attention to the specimens collected by Georg Schweinfurth during his travels through Egypt and the nearby territories last century. These are now arranged in the Agricultural Museum of Cairo.

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1. This palette was first published by G. Steindorff in *Festschrift für G. Ebers* (Aegyptiaca, 1897) 122 f. However, it owes its name as the *Tehenu* palette to K. Sethe, *ZÄS* 52 (1914) 55-59. Later Margaret Murray believed she recognised *the twisted skein* among the signs on the palette in W.M. Flinders Petrie, *Ceremonial Slate palettes* (1953) 15. See also H. Asselberghs, *Chaos En Beheersing* (1961) Nos. 164 and 165, plate XCII, 337f.

2. V. Täckholm and M. Drar, *Flora of Egypt* (1941-1969); most recently, "Ancient Egypt, Landscape, Flora and Agriculture" in *The Nile, Biology of an Ancient River*, ed. J. Rzoska (1976).

3. M. Nabil El Hadidi, "The Riverain Flora in Nubia", ibid.

Much work in this field has also been done in recent years by Karl Butzer[4] and M. Kassas[5], both of whom, it may be said, have opened up for our future consideration ecological questions without an understanding of which we shall never properly grasp Egypt's early monuments.

Until now Egyptologists have had an easy time of it with regard to ancient vegetation because seeds and fruits are often preserved in the tombs in recognisable forms. It is unfortunate that excavators in Egypt do not all pay great attention to stratigraphy or sift the soil of a site in order to obtain the finer details, such as fig seeds, grape pips and olive stones, as has been the recognised practice now for many years in the best Aegean archaeological work. Our knowledge of the common herbs and trees in ancient Egypt is still very far from complete. For example it is remarkable that while the *olive* is attested in all the Early Bronze Age levels in Palestine(6) as well as the *Laperrine olive* in neolithic levels in the western Sahara(7), we have no evidence for it so early in Egypt. This may well be because no-one has looked for such evidence, rather than that none is there to be found. Similarly, fig-seeds have been found in prepottery neolithic A levels in Jericho(8) but we have no such firmly-based early evidence for Egypt.

4. K.W. Butzer, *Studien zum vor- und frühgeschichtlichen Landschaftswandel de. Sahara* (1959), Akademie der Wissenschaften und der Literatur im Mainz, Wiesbadeny Also "Environment and Human Ecology in Egypt during Predynastic and Earer Dyanstic Times", *Bulletin de la Société de Géographie d'Égypte* 32 (1959); also sel Helck and Otto, *Lexikon der Ägyptologie* : "Delta".

5. M. Kassas and others, "Habitat and plant Communities in the Egyptian Desert" in *Journal of Ecology* XL (1952), XLII (1954, LII (1964), LVIII (1970). Also *Bull. Soc. Géog. d'Égypte* 26 (1953), 30 (1957), 35 (1962).

6. A.C. Western, "The Ecological Interpretation of Ancient Charcoals from Jericho", *Levant* III (1971) 31-40; also unpublished thesis (1969) St. Hugh's College, Oxford, *An Attempt at the Ecological Interpretation of Charcoals with Special Reference to Material from Jericho*, which is a most stimulating discussion of the ecological probelms of the Near East in general.

7. P. Quézel, "De l'application de techniques palynologiques à un territoire désertique. Paléoclimatologie du Quaternaire Récent au Sahara" UNESCO, Arid Zone Research XX. Proceedings of the Rome Symposium, *Changes of Climate*, organized by UNESCO and the World Metereological Organization (1963) 243-249.

8. Western, op. cit. (1969) 93.

This lack of environmental information makes it very difficult for us to assess correctly some predynastic and early dynastic pictorial material that has come down to us especially when plants and animals are shown.

The "Trees and Towns" Palette

We are all familiar with that beautiful palette fragment from Abydos (Fig. 1 & 2), dating from the Late Gerzean period, which is now in the Cairo Museum(9). On it we see some trees which W.M. Flinders Petrie thought was an olive grove(10). As we have already said, we have no evidence for the olive in Egypt as early as the Late Gerzean period, although it is quite possible that it was growing there at that time.

However, a major characteristic of the trees on this palette is that they are depicted as a thick growth, filling all the space available in that sector of the palette, without indicating cultivated rows, necessary for watering. Such a thick growth of trees suggests a forest rather than an orchard or grove. Moreover, even taking into account the fragmentary nature of this document, the trees are not shown in the personal context that one would expect if they represented someone's orchard or grove. Therefore it is most likely to be a forest.

Another point that must be made is that the manner in which the foliage is depicted, although fairly schematic, is not consistent with the olive-tree. One of the few clear characteristics of the trees on this palette is the manner in which the leaves are shown to be growing, namely in parallel shoots on either side of the stem. This does not apply to the olive.

This could, however, apply to the *acacia* which also has a similar branch pattern as that shown by these trees.

9. For a discussion of the backgound to these early documents, see W. Kaiser, "Einige Bemerkungen zur Ägyptischen Frühzeit", *ZÄS* 86 (1961) and 85 (1960), but particularly 91 (1964) which also discusses the shapes of the slate palettes; P. Kaplony, *Kleine Beiträge zu den Inschriften der Ägyptischen Frühzeit* (1966); E. Baumgartel, *The Cultures of prehistoric Egypt* (1955), J. Vandier, *Manuel d'archéologie égyptienne* (1952) Vol. I, as well as the books mentioned in note I.

10. Petrie, op. cit. 10 and 14.

Dr. Nigel Hepper, who very kindly examined the trees on these reliefs for me said that they could be *acacias*. This tree is often portrayed in the ancient Egyptian reliefs and paintings, most notably and beautifully in the twelfth dynasty tomb No. 3 from Beni Hasan([11]) where it was recognised as a specimen of the *sont* family of acacias because of the flowers which are shown as yellow balls on the trees. Acacias are to be found growing in Egypt in many places even today and Karl Butzer([12]) has stated that there are more than twenty varieties growing in the Nile valley at the present time.

It is most interesting to note a study of the vegetation of the deserts near Cairo by P.H. Davis in 1953([13]) *where he found the remains of an acacia forest east of Cairo.* Davis noted that the *acacia tortilis* was abundant around Gebel Galàla while some remaining specimens were to be found in the wadis south of the Cairo-Suez road.([14]) The absence of acacias in the wadis near Helwan was due to interference by man, Davis believed. He noted that Schweinfurth in 1901 referred to a small tree of this variety in Wadi Gerrawi, south of Helwan, indicating a survival.

A careful examination of this side of our palette will show that the name it received from the beginning as the "Tehenu" palette was erroneously conceived from the fact that the signs on the right hand side of the trees were believed to suggest the name "Tehenu", One scholar thought that one of them represented *the twisted skein*([15]). Fortunately these signs are excellently preserved and a careful look at them will show beyond doubt that there is no *twisted skein* there. These signs clearly represent an *island* with a *throwstick* rising vertically from it (Fig. 2).

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11. P. Newberry, *Beni Hasan* (1893) Vol. IV, plates frontispiece, VI and VII.

12. Butzer, *Studien etc.* cit. 88.

13. P.H. Davis, "The Vegetation of the Deserts near Cairo", *Journal of Ecology XLI* (1953) 157-173.

14. ibid. 168f

15. It is Margaret Murray's opinion that is recorded in Petrie, op. cit. 15 sugesting this. Sethe, op. cit. did not see a *twisted skein* there but drew his conclusions from the *island* and *throwstick* signs which he recognised as such. See also J. Vandier. op. cit. 590ff.

I have already discussed at some length elsewhere the idea first brought forward by Charles Kuentz([16]) and discussed further, though with a number of reservations, by Jean Vercoutter,([17]) that the island sign stands for the Asiatics of the swampy North Land. Georges Posener([18]) once suggested that they were called ʿ3mw precisely because of the watery place in which they lived. I shall not repeat here the evidence I brought forward elsewhere([19]) suggesting that the *islands* of the Ramesside texts, representing cumulatively the enemies of Egypt at that time, were her traditional western Asiatic opponents from the North Land.

The *throwstick* is attested actually in the hands of the *ʿ3mw*, fortunately so labelled for us, in the well-known scenes from Beni Hasan tomb No. 3([20]). Few people will disagree with the view that it is an Asiatic weapon. Alan Gardiner pointed out([21]) that this sign is often confused with the finger. However on this palette it is definitely a *throwstick* because of its carefullydrawn, curved base and the proportions of its component parts.

There is considerable significance in the fact that the *island* and *throwstick* are portrayed in indisputably close conjunction with the trees. It is also very important to note that these signs are placed on the right hand side of this forest, thus probably indicating *the east.* It is no doubt coincidence that these trees resemble acacias and that Davis found the remains of an acacia forest in the

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16. M. C. Kuentz, "Autour d'une conception égyptienne méconnue : I, *Akhit* ou soi-disant horizon", *BIFAO* XVII (1947), 148ff

17. J. Vercoutter, "Les Haou-nebout" *BIFAO* XLVI (1947) and XLVIII (1949)

18. G. Posener, "Sur L'orientation et l'ordre des points cardinaux chez les égyptiens", *Nachrichten der Akademie der Wissenschaften in Göttingen* (1965) No. 2, p. 75 note 10.

19. A. Nibbi, *The Sea peoples and Egypt* (Noyes press, New Jersey 1975) 48-62.

20. Newberry, op cit. Vol. I, plate XXXI.

21. A.H. Gardiner, *Grammar*, Signlist T 14 and D 50.

wadis east of Cairo and south of the Cairo-Suez road. However, the symbolism of the *island* and the *throwstick* is clear enough.

If we accept their significance as symbols for ancient Egypt's western Asiatic neighbours who came from the north-east, we must conclude that the palette has us looking northwards *as people from the south of that area.*

As a further confirmation of this we see that the row of donkeys (or onagers) (22), shown in a register above the forest, are wearing their forward harness. It is certainly harness and not the markings which some donkeys have down their flanks, since it is broader and is shown clearly to reach around their girth. Consequently we are meant to understand that these animals have either just deposited a load or are just going to pick one up. They are walking eastwards, we must note. This too fits in with the Asiatic tradition of donkey caravans.

The other animals shown on this side of the palette are represented as being completely tame and under control. There can be no doubt that this is a peaceful, if not idyllic, statement of some situation.

The question has been asked as to how this side of the palette can be related to the otherside showing seven towns which reputable scholars have interpreted as being represented in the process of being hacked down (Fig. 1). This was Steindorff's view when he first published this palette. There can certainly be no doubt that the figures above the towns are actively using their hoes in relation to the town walls. If this is really a representation of hostility, I am unable to relate the two sides at all.

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22. These donkeys seem to have the tails of horses which would indicate that they are either onagers or mules. If they are onagers in harness, they recall the well-known standard of Ur, Pritchard, *The Ancient Near East in Pictures*, 303 and 304 p. 97. For a study of the ass in ancient times see Max Hilzheimer, *Animal Remains from Tell Asmar* (1941); also F.E. Zeuner, *A History of Domesticated Animals* (1963), and J. Boessneck, *MDIAK* 26 (1970).

However, we should recall here the well-known but little understood scene from the so-called "Scorpion" mace-head in the Ashmolean Museum (pl. 1). Here the Pharaoh is holding a hoe in what was recognised by Elise Baumgartel(23) as a foundation ceremony rather than an agricultural rite. She found support in the study of Pierre Montet(24) which discusses pharaonic ritual with regard to the foundation of the temple. But we can be reasonably sure that the founding of a city also required some ritual, even though we dont yet have records for it from the Egyptian context. Certainly the fact that each town has a different symbolic figure over it would tend to confirm this idea, even though the towns are represented as a group, presumably with an affinity of some kind. We are well aware of the traditional independence of the ancient Asiatic cities from each other.(25) But the figures over these towns are found elsewhere on documents which have always been considered to be Egyptian. Further finds in the future may help us to understand this palette better.

It is not impossible that these towns were meant to be shown as situated in the Eastern Delta. But in recent years, investigation in these areas has necessarily had to be postponed. However, we must return to a study of this region with some urgency(26).

There is a growing body of scientific evidence indicating a much lusher climate in northern Africa up to approximately I,000 B.C. This must have an important bearing

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23. Elise T. Baumgartel, "Scorpion and Rosette and the Fragment of the Large Hierokonpolis Macehead", *ZÄS* 93 (1966) 9-13.

24. P. Montet, "Le rituel de fondation des temples égyptiens" *Kêmi* XVII (1964), 74-100. This is a convincing study which shows that the hoe was used as a symbol for *building* as well as for destroying. If the designer of this palette wanted to convey the origins of these specific towns, he would have to show the symbols of the towns, to identify them pictorially, as well as symbols for the clans who founded them, presumably. In Near Eastern symbolism, the walled enclosure symbolizes *a town* and not necessarily a fortress at all because all towns had walls.

25. G. Buccellati, *Cities and Nations of Ancient Syria* (1967). An essay on Political Institutions With Special Reference to the Israelite Kingdoms. Also K. Kenyon, *Royal Cities of the Old Testament* (1971) 5-12.

26. In my paper in Proceedings of the First International Congress of Egyptology (Cairo, 1976) I discuss the reasons for this urgency.

on the vegetation and the animal habitat of Lower Egypt and its adjacent areas, and consequently, on its history.

Among the most recent studies on this subject we have those of F. Alayne Street and A. T. Grove(27) of the Geography Department of Cambridge (Britain) who worked on late quaternary lake level fluctuations in Africa. Relying exclusively on radiocarbon-dated chronologies, they constructed a series of maps representing lake level patterns during each millennium since 21,000 before the present. This led them to conclude that after a wet and fertile period, desert conditions once more descended on the Sahara from 3,000 years before the present.

A study of the late quaternary period in the Sahara by P. Quezel(28) of the Botany Department of the University of Alger (Algeria) by means of Pollen analysis and the examination of wood remains has shown that the last period of precipitation in the Sahara led to the spread of the Mediterranean vegetation as far south as Hoggar and Tibesti, where around 10,000 B.C. *oak* and *cedar* forests are attested. After that, progressive drying led to the appearance, around 5,000 B.C., of the *pine, the junipeer cypress* and *olive*, after which period a savannah vegetation prevailed, with *acacias* and *tamarisks* and other plants related to this group. However, pockets of Mediterranean vegetation have continued to exist in these areas up to the present day(29) in favoured and sheltered places.

F. Wendorf and others(30) have been studying the prehistory of the Egyptian Sahara taking into account the climatic history and former fertility of the area. They found that the Egyptian western desert was occupied only during specific and restricted time intervals that closely

30. F. Wendorf and others, "The Prehistory of the the Egyptian Sahara", *Science* Vol. 193, No. 4248 (1976)

27. F. Alayne Street and A.T. Grove, "Environmental and Climatic Implications of late Quaternary lake-level fluctuations in Africa", *Nature* Vol. 261 (1976).

28. Quézel, op. cit. see note 7.

29. ibid. p. 248

coincide with episodes of significantly increased moisture. One of their conclusions was that it is unlikely that the Sahara was a significant contributor to the archaeological diversity evident along the Nile during the Late Palaeolithic.

Climatic change in the Sudan has in recent years been studied by Dr. G.E. Wickens of the Herbarium, Kew with special attention also to the effect of animals and man on the vegetation. This study too describes a southward movement of the increasing rainfall followed by a period of progressive drying, with the eventual northward recession of the rainfall. Dr. Wickens found palaeobiological evidence to suggest that there were northward shifts of 400 kilometres between 12,000 and 7, 000 years before the present and 250 kilometres between 6,000 to 3,000 before the present as a result of his study of the dunes. There were corresponding parallel shifts of the vegetation

From Lower Egypt itself we have few published purely scientific studies. But one of the most important for us is the work on core samples by S.I, Saad and S. Sami in the Delta itself These scientists from the Botany Department of the University of Alexandria took core samples at different depths in the Berenbal region of the Delta, twelve kilometres south of Rosetta. Most numerous of all pollens in these samples at every level were the *gramineae* and *cyperaceae* (grasses and papyrus) the next numerous at all levels being the *compositae* family. But quite remarkably, these scientists found *pine pollen* at levels of *one*, *eighteen* and *nineteen* metres. At later levels than these, that is, up to fourteen metres' depth, they found *tamarisks*, *acacias* and other related growth. It is good to know that Professor Saad is continuing with this work in his department. We are looking forward to further results.

31. C.E. Wickens, "Changes in the Climate and Vegetation of the Sudan since 20, 000 B.P." *Boissiera* 24 (1975) 43-65.

32. S.I. Saad and S. Sami, "Studies of Pollen and Spores Content of Nile Delta Deposits (Berenbal Region), *Pollen et Spores* Vol. IX, No. 3 (1967) 467-503.

We must therefore reconsider our picture of the vegetation of Lower Egypt and the Delta. We must remember that until about 1,000 B.C the remains of the wet period affected the vegetation of north Africa approximately as far south as the latitude of 20 degrees north of the equator. This reality must be taken into account when considering animals and man in these regions, during the Old and Middle Kingdoms as well as in predynastic times.

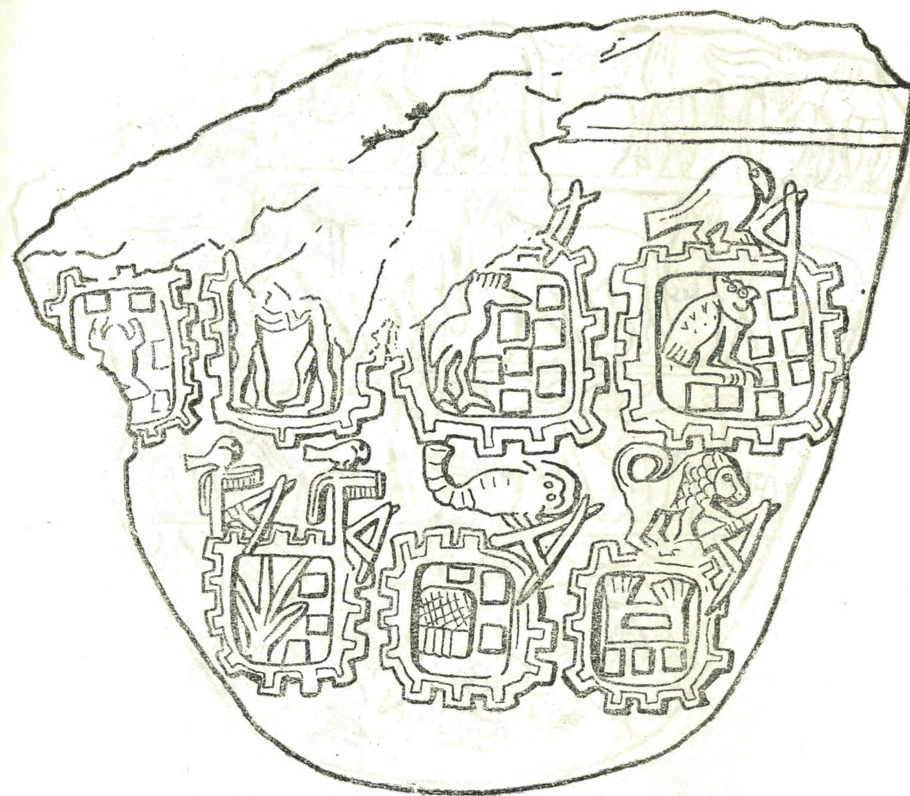
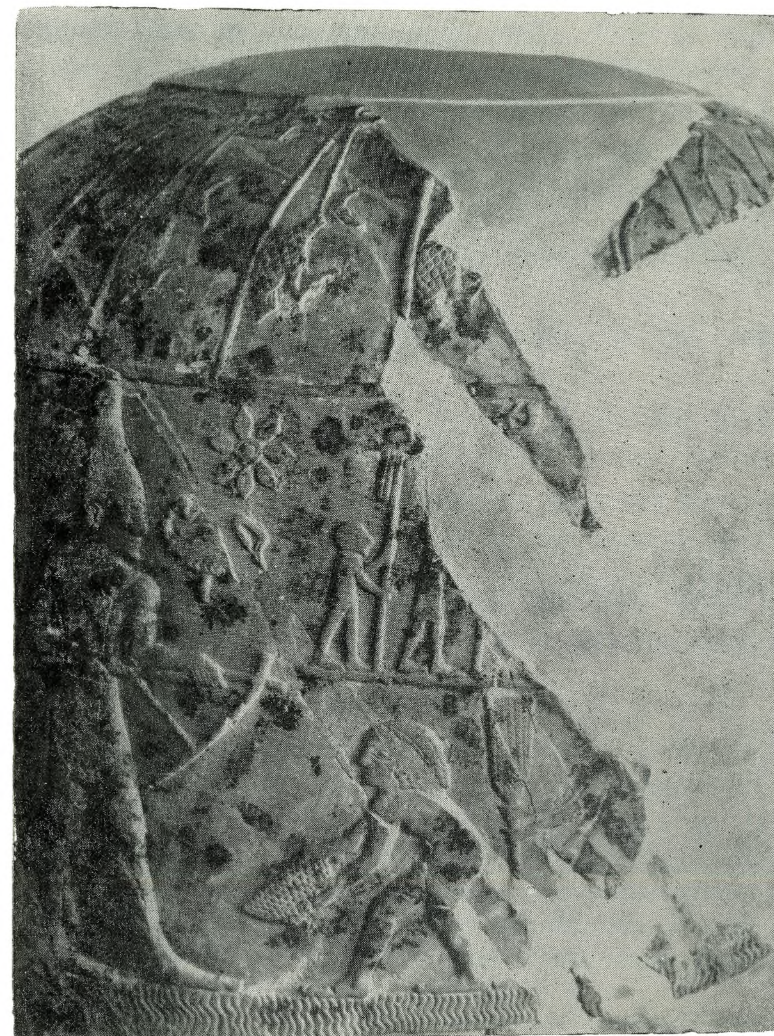


FIG. 1

J. 27434



FIG 2



Scene from Hierakonpolis Mace-head.
Photograph : Ashmolean Museum.

SOME OBJECTS FOUND AT TELL BASTA (SEASON 1966-67)

BY

AHMED EL SAWI

Owing to the religious importance of Tell Basta, the Department of Antiquities has conducted four seasons of excavations on that site since 1961. During those seasons the work was carried out in the following areas :

1. The Middle Kingdom Palace to the north east of the Tell. In the previous seasons the eastern, southern and northern sides of the outer enclosure wall of the Palace were discovered(1).

2. The Middle Kingdom cemetery to the east of the palace.

3. The New Kingdom cemetery to the south of the palace.

4. Cat's cemetery to the east of the city of Zagazig and the west of El-Moʿhada road.

During the 1966-1967 season, the work was resumed in the Palace in order to discover the eastern part of the outer enclosure wall. There, a number of rooms, halls and stores built of mud brick, were discovered (Pl. 1). In the debris in one of the halls two offering tables were found(2).

A.—The first offering table (Pl. 2), made of limestone, was found in a fragmenty condition; some fragments were missing. It measures 48. cm length and 37.cm width. It has four basins and bears six lines of inscription; In the middle of the offering table, there is inscription in high relief. This inscription represents a part of the deceased standing before some offerings : birds, wine jars and some fruit. The inscriptions run as follows :

(1) Farid Shafik, Preliminary report on the excavation of the Antiquities Depart. at Tell Basta season 1961. Annales du Service des Antiquités, LVIII, pp. 85

(2) This paper has been written ten years ago as a very brief preliminary excavation report. In the meantime the author of the paper has decided to publish a new paper dealing only with the two historically most important finds, i, e. the offering tables.

B.—About one metre to the west of the last offering table, another one also of limestone was found, (Pl. 3). It measures 55 × 52 cm. It is of a rare shape; it also has four basins and two loaves; it bears six lines of inscriptions running as follows :

On the same site along the Palace of the M.K, at a level of one metre higher than the floor of the Palace, small rectangular tomb built of mud-brick, vaulted and plundered, was discovered. The tomb extends from east to west. It measures 300 × 50 × 110 cm. (Pl.4). At the north west corner a biconical jar wi:h a storied neck was found. It measures 70. cm high; the diagram of its mouth measures 13. cm. On one of its side; there is a painting representing the Goddess Bastet in an Osiride form holding the crook ( ) and the flagellum ( ) in her hands (Pl. 5).

On the same site and at the same level with the Palace floor, some children burial cases were found in a fragile condition. So it was difficult to remove them from the debris.

In one of these burials, beside a child's neck, a necklace of beads and 19 amulets were found (Pl. 6).

The important ones are :

1. A barrel-shaped bead of steatite (L.2,3 cm,w. 8 cm) with the name of King Senusert in bas-relief.

2. A double cylinderical - shaped bead of steatite L.2 cm, W., 8cm) with the name of King Amenemhat III in bas-relief.

3. Cylinderical - shaped bead of steatite (L.2 cm) with the name of King Amenemhat III in bas-relief.

4. A cartouche - shaped amulet of steatite with prenomen of - Amenemhat III Ny - maꜥt - Reꜥ in bas. - reliet. It measurs L.1,4 cm. W., 8 cm.

5. A monkey-shaped amulet, (H., 9 cm).

6. A serpent's head-shaped amulet from carnilian, (L. 1,2 cm.)

7. A serpent's head shaped amulet from quartz, (L. 1,8 cm).

8. A crocodile-shaped amulet of soapstone,(L.2,6 cm)

9. A serpent's head-shaped amulet made of faience, (L 1,6 cm.).

10. A hawk-shaped amulet of Jasper-stone ?, (H. 1,3 cm.).

11. An amulet in form of the crown of Upper-Egypt; made of filsbar stone ; (H. 1,4 cm).

12. A small scarab of steatite with decoration on the belly bearing the sign kɜ : (L., 8 cm).

13. A sacred-eye of carnilian, (L. 1cm).

14. A pear-shaped pendant of pebble, (L 2,4 cm).

15. A scarab-beetle shaped amulet of steatite, with small part missing, (L. 1,2 cm).

16. Sphinx-shaped amulet of steatite, (L. 1 cm).

In addition to the above mentioned amulets there are some various beads of carnelian and steatite of which the necklace is composed (Pl. 7).

Ahmed El Sawy

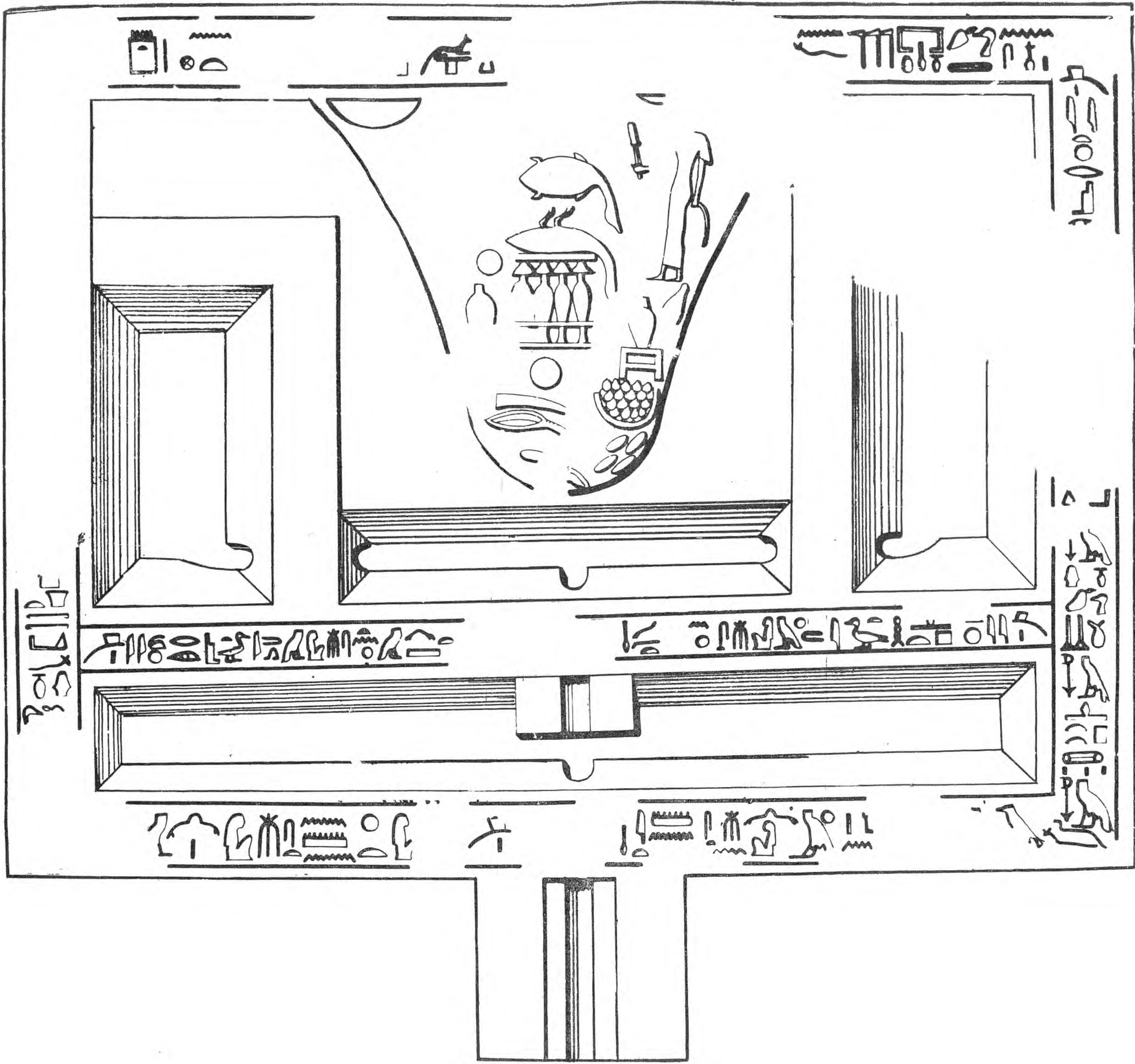


The site west the Middle Kingdom Palace after discovery

Pl. I

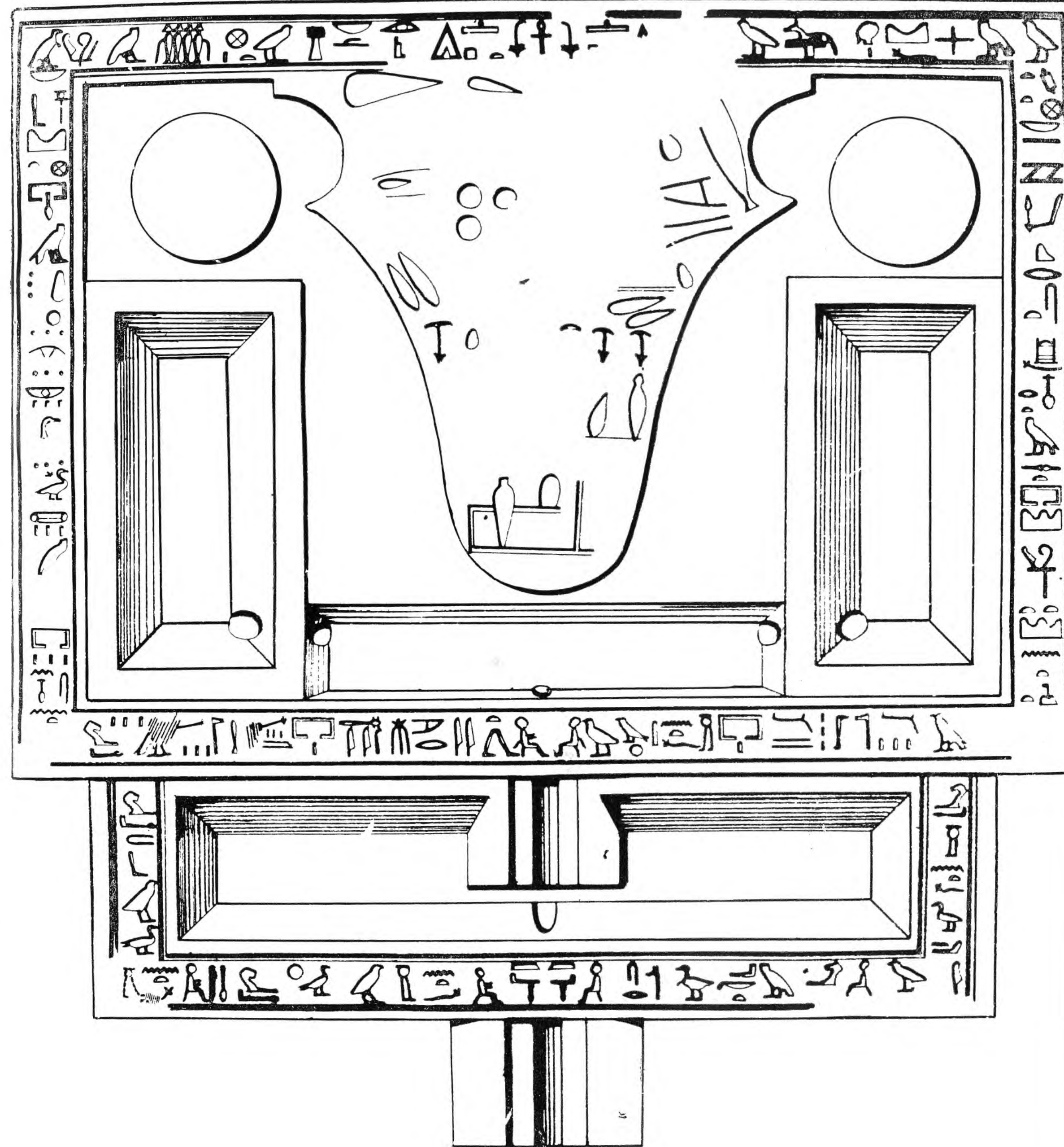


An offering table from limestone

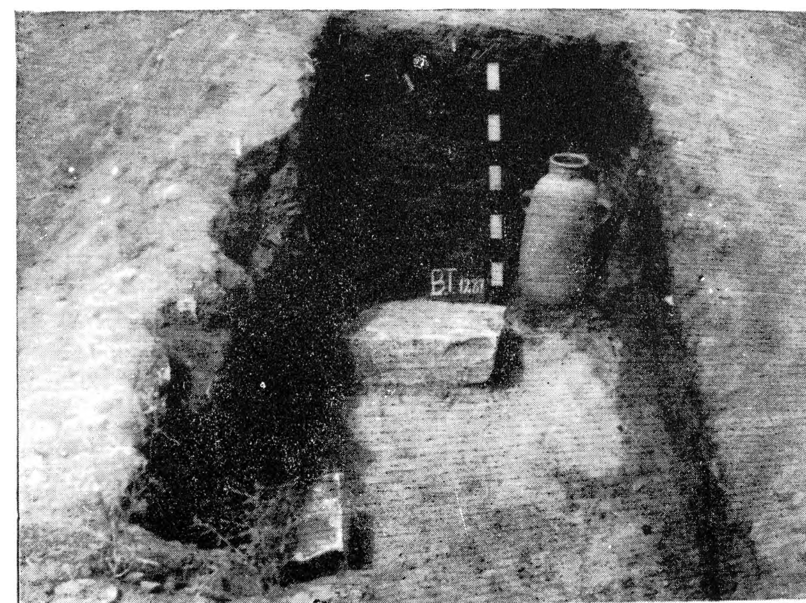

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Second offering table of limestone



Pl. IV (*a*)

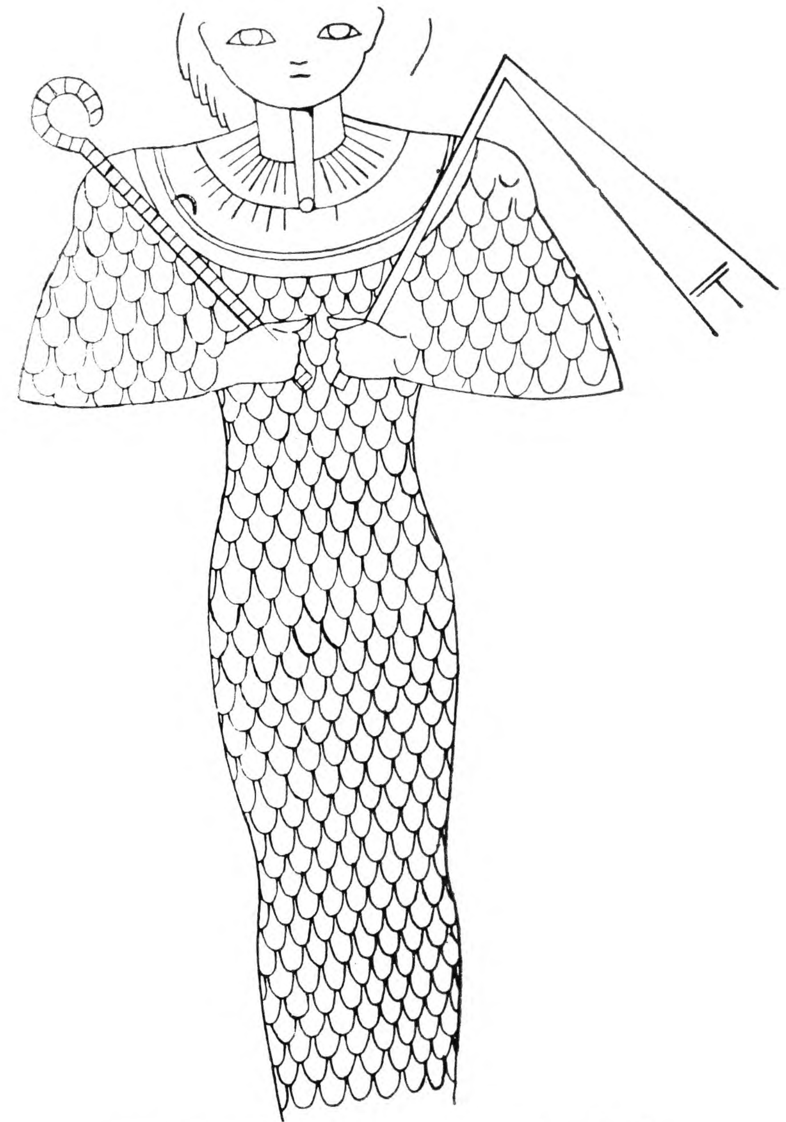


Rectangular tomb from mud-brick with a jar on its corner.

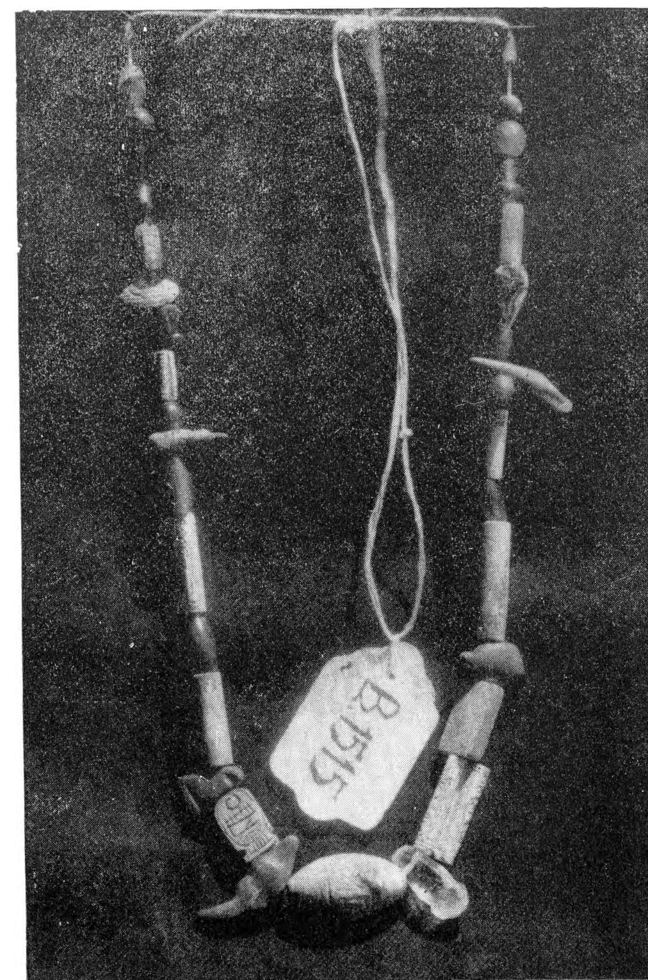


A ware jar bearing a painting representing the Goddess Bastet in an Osiride form.

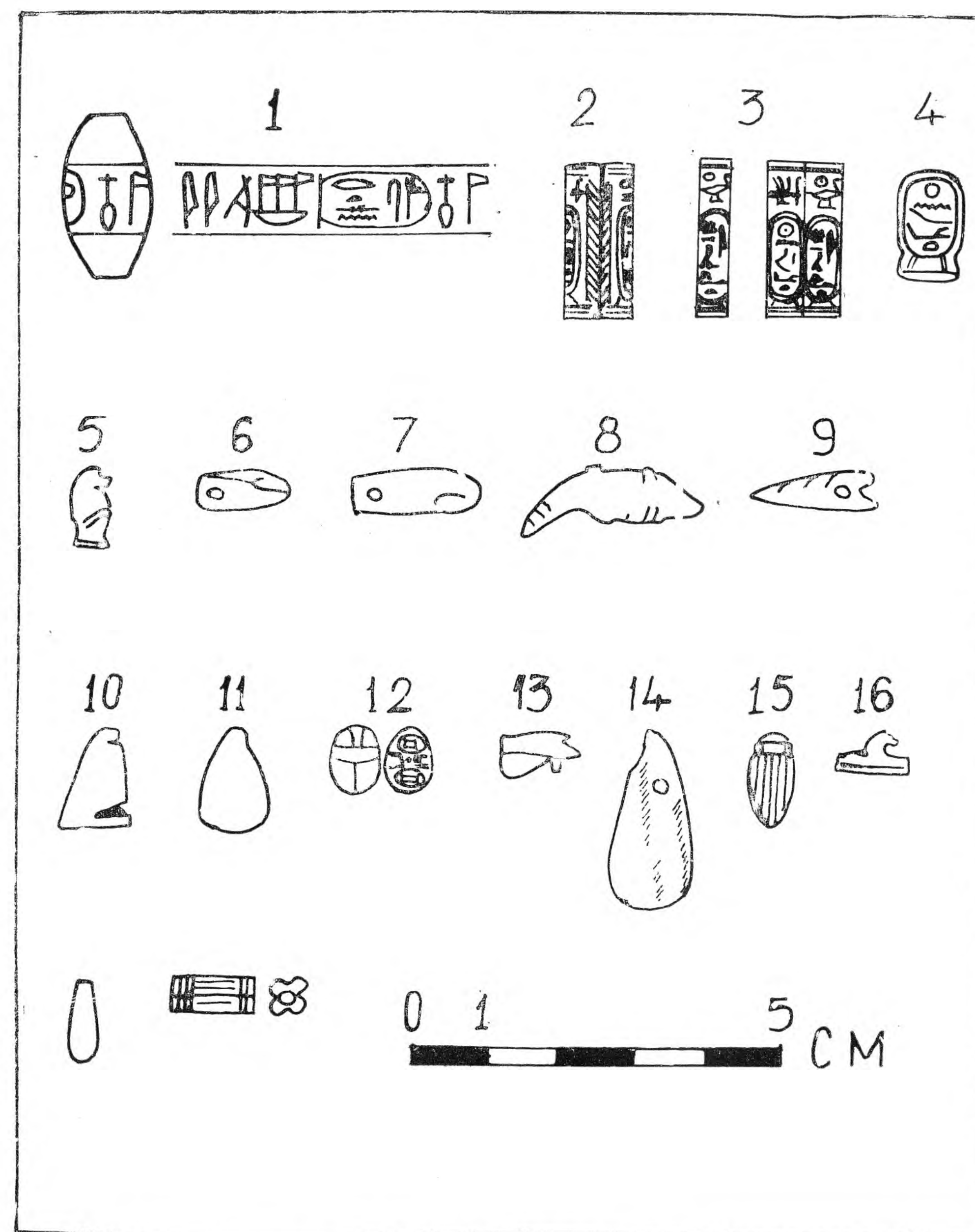
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The Goddess Bastet as represented on the jar.



A necklace of beads and various amulets.



The amulets found with the necklace.

"PRELIMINARY REPORT ON THE RE-CLEARANCE OF TOMB 25 IN THE WESTERN VALLEY OF THE KINGS" (WV-25)

University of Minnesota Egyptian Expedition January 1976

BY

OTTO J. SCHADEN

From the period of June 24 through August 10 of 1972 the University of Minnesota Egyptian Expedition(UMEE) cleared the tomb of King AY (WV-23) and an uninscribed tomb (WV-25) in the Western Valley of the Kings(1). This report concerns primarily WV-25; the work on Ay's tomb will be described elsewhere.

WV-25 was discovered in 1817 by Belzoni(2). In his account, the discovery of the sealed chamber, eight mummies and the impressions their coffins left in the floor debris were among some of the highlights described. In addition, he made some remarks about a''yellow skeleton'' (one of the eight mummies) which showed signs of careful rewrapping. In more recent times, Carter and Chassinet

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(1) The expedition was funded primarily by means of a contribution of Cecil and Leonore March of St. Paul, Minnesota. These funds were administered by the Minnesota Foundation. Additional funds were provided by a McMillan Travel Grant and a Graduate School Special Grant. Regents' Professor Tom B. Jones was project director.

The field staff consisted of Otto J. Schaden (*mudir*), Charles F. Aling and Richard B. Brown. Our architect was Ragai Zaki. Samir Amis Salib was our inspector during the first part of our season and Mamdouh Barakat served in this capacity during the second part. Hamid Mohammed Aboudi of Quft was our *reis*.

Though not attached to the expedition in any official capacity, many thanks are due to Elizabeth Thomas with whom the author has enjoyed a most informative correspondence concerning various matters regarding the King's Valley.

The author wishes to take this opportunity to thank all, from our most generous patrons to our smallest basket carrier for their assistance.

(2) Belzoni, *Narrative of the Operations and Recent Discoveries within the Pyramids, Temples, Tombs and Exavations in Egypt and Nubia* (2nd Edition;London 1821) Vol. 1 170 ff. and 223 ff. For a discussion of subsequent investigations, cf. Thomas. *Royal Necropoleis of Thebes* (Princeton, 1966) pp. 81-83, 87, 89-90. Neither edition of the Porter-Moss *Topographical Bibliography etc.* includes a discussion of WV-25.

were among those who have carried out some investigations with regard to this tomb[3]. While the tomb had been examined several times since its discovery, it may appear at first glance to have yielded all its information. However, in her informative work on the royal cemeteries of Thebes Thomas has called attention to the rewrapped skeleton (perhaps part of a royal cache ?), a fragment of a granite sarcophagus lid, and the royal design of the tomb[4]. Of possibly great significance was the absence of any foundation deposits which are presently known from only a few of the royal tombs of the New Kingdom, but which may have been a more common feature of such tombs[5]. As the UMEE was asking permission to clear Ay's tomb, the nearness of WV-25 and the fact that it have been cleared before left the possibility of making some useful discoveries (with minimum effort) concerning the history of the tomb and the late XVIIIth Dynasty in general[6]. Furthermore, a re-clearance would enable us to get a plan of the tomb. Permission to examine the tomb was readily given. Our special thanks are due to the Antiquities Department for their assistance.

WV-25 lies less than 100 metres roughly to the east of Ay's tomb. It was cut into a sloping hillside, but was never completed. Only the stairway leading down to the door of the tomb and one ramp beyond the door were finished (cf. plan, Plate I). Comparison of the plan with other royal tombs of the period leaves no doubt that it was intended as a royal tomb[7]. The plan available to Thomas contains no indication of the floor inasmuch

(3) Thomas, *Royal Necropoleis* pp. 82-83.

(4) *Ibid.*, p. 83.

(5) *Ibid.* For New Kindom royal tombs at Thebes foundation deposits are known from WV-22 (Amenophis III) KV-43 (Thutmose IV), KV-20 (Hatshepsut), KV-42 and KV-2 (Ramses IV). In these instances the deposits are generally opposite the top of the entrance stairway or else flank the entrance.

(6) In September of 1971 the author spent a day investigating WV-23 and WV-25. In the latter the pile of mummy fragments and wrappings made it seem very likely that sufficient portions of the yellow skeleton could be gathered together for study. On the date of WV-25 cf. Thomas' remarks (Note 2 above).

(7) Compare the plan with those in Thomas, *Royal Necropoleis* or in Steindorff and Wolf, *Die Thebanische Gräberwelt* (Glückstadt and Hamburg 1936).

as the tomb was cluttered with debris[8]. Cuttings at the bottom of the tomb indicate that more chambers were intended, but for some reason work was halted. It is possible that the nature of the rock near the entrance was responsible for the tomb's abandonment, for not until the lower part of the entrance stairway is reached does one encounter solid rock. The hard-packed gravel and boulders overhanging the entrance may have been considered unstable. Before the UMEE began the reclearance, we had a number of discussions with our architect and inspectors concerning the safety of work in WV-25. It was decided that the work could be carried out safely, though as a precaution, a stone wall was installed as a support for the north side of the upper portion of the entrance stairway.

It is possible that it was not the nature of the rock but rather some other reason that caused the abandonment of the tomb. Whatever the cause (or causes) of WV-25's incomplete state, there are some indications that it may have served as a burial place prior to the late New Kingdom (cf. below). XVIIIth Dynasty sherds are common in the area, and some artifacts of that date were discovered scattered amongst the debris cluttering the tomb. There is the chance that these XVIIIth Dynasty materials are intrusive. As the tomb was never decorated or inscribed, and as no foundation deposits were found, it is very likely that the original owner of the tomb will never be known.

In the fruitless search for deposits, some trenches were cut near the entrance and then gradually widened to cover a larger area (cf. Plate II for the area cleared). In the roughly 6 x 10 metre area investigated, we dug well below the relatively loose dark surface debris (the depth of this surface level was ca. 20-30 cms.). As in the case of Ay's tomb, no artifacts appeared below this surface level.

(8) Thomas, *Royal Necropoleis* p. 85, Fig. 9 no. 25. The debris as we found it was placed there by one of the post-Belzoni investigators. In brief large rocks and boulders choked the entrance stairway and in the lower chamber were mummy fragments near the door and small rocks filling the bottom of the tomb.

To be as thorough as possible, we felt that by going well below this surface level there would be little chance of missing any deposit(s). The area covered corresponds roughly to the areas where deposits are known from other tombs. It is possible that either deposits were not always made, or else that they need not necessarily be in any specific location with regard to the actual entrance of the tomb. Sherds picked up in the area cutside the tomb included a considerable quantity of Dynasty XVIII and some Roman materials (cf. Plate III and Plate VI, B) (9).

The entrance stairway was cluttered with large rocks. Mixed in with this fill were some stones of roughly rectangular proportions which proved to be once part of the upper stairs. Also found were some mummy fragments, mummy wrappings and the like. One unexpected find was a limestone flake on which was a sketch in red of a seated man (Plate IV), late XVIIIth Dynasty in date(10). Once cleared, the stairway was found to consist of at least seven steps built up with rocks and mud on the hard-packed gravel, and eighteen stairs cut from the living rock. The bottom stair with its extensions out to the doorposts is very similar to the arrangement in Ay's tomb, adding further support to Thomas' suggestion of a late XVIIIth Dynasty date for WV-25.

The doorway leading into the lower chamber was sealed at the time of Belzoni's discovery. Despite Thomas' hopes that some of the lower parts of the sealing might still be preserved[11], no traces were left. Presumably one of the later investigators removed them. The pile of debris just beyond the door was filled with mummy fragments, wrappings, sherds and a few more unexpected items. The mummies, at least most of them, appear to

(9) Less than 7 metres from the beginning of the tomb are the remains of roughly circular stone foundations possibly the remains of workmens's huts contemporary with the late XVIIIth Dynasty tombs in the western Valley. As these structures were not part of our concession they have been left for future consideration. With the lack of deposits from WV-23 and WV-25 ; the excavation of these structures takes on greater importance.

(10) The elongated head is reminiscent of the Amarna style. At present I would hesitate to suggest a more "exact" date than late Dynasty XVIII.

11. Thomas, *Royal Necropoleis*, p. 83.

be of late New Kingdom (Dynasty XXI-XXII) date(12). The discovery of some cartonnage fragments and a part of a blue glazed ushebty confirms this late New Kingdom date. Parts of the yellow skeleton were found. Unlike the other human remains, these contained no traces of flesh. A number of pieces of the yellow skeleton have been set aside for study, but the hurried schedule of the closing days of the dig did not allow time to make the necessary arrangements to have the skeleton and some other study materials approved for shipment home. Hopefully some arrangements can be made in the not too distant future.

Some of the items indicate not only the possibility of a burial in the XVIIIth Dynasty, but a royal burial. Of a distinctly royal nature are several prongs from fayence uraeus serpents(13), part of a wooden flail (Plate VI, A), and fragments of two lifesize wooden statues. Of the latter, two left ears and parts of two right feet were found (Plate V). One is immediately reminded of the almost lifesize statues which were found guarding the sealed doorway to Tutankhamun's burial chamber(14). Unfortunately none of the earlier excavators seem to have reported anything of this nature. None of the other wood fragments found in our clearance of WV-25 could be identified as being part of of these statues. It is possible that these XVIIIth Dynasty items once formed part of the original burial equipment for WV-25. Assuming that a burial took place here in the late XVIIIth Dynasty, the remains of it could have been smashed and scattered about before

(12) Thomas quotes Carter as having assigned them to Dynasty XXII (*Ibid.*). The pieces we collected were far from representing eight complete bodies. For example, no heads were found. Sufficient fragments remain to warrant a medical examination.

(13) Several fragments of this type of uraeus serpent were found in and near WV-25. In Ay's tomb they were relatively common : enough pieces for at least seven uraei were noted. Examples from these two tombs were virtually identical.

(14) Cf. Carter, *Tomb of Tut-ankh-Amen* (London 1923-1933) Vol. I 99 and Plate XLI and Vol. 11 41. Tutankhamun's statues were decorated with gold leaf and black paint. The fragments from WV-25 contain some traces cf black paint. Statues of this type are not especially common. Other known examples are of Amenophis II, Ramses I and perhaps also Ramses II cf. Edwards, *Treasures of Tutankhamun* (London British Museum 1972) Text to Object 1 of the Catalogue. It is not certain whether or not the flail fragment is from one of the two lifesize statues of WV-25.

the late New Kingdom burials were made. As the coffins were found to have left impressions in the floor debris one might assume that this floor fill contained many fragments of the earlier burial equipment.

If we consider the possibility of a royal burial in the late XVIIIth Dynasty, there is little doubt that we have to assume that it was not a very elaborate affair. By comparison, the few items associated with royalty in WV-25 are extremely meagre in quantity and variety when contrasted with the numerous artifacts (or fragments there of) from some other royal tombs (cf. for example the tombs of Thutmose IV (15), Akhenaton (16), and Tutankhamun) (17). Furthermore, there is no appropriate room or place wherein to install the bulky shrines and the like. If there was a burial in WV-25 in the late XVIIIth Dynasty, it was probably a hasty and relatively poor affair for some member of the royal family.

There is another more attractive possibility. The royal items may have been moved over from some other tomb, possibly Ay's tomb(18). Ay's tomb had been desecrated, probably not very long after his death. Items therefrom are not especially numerous, but there seem to be enough indications that a burial did take place[19]. All indications are that Ay was given a rather meagre funeral. Perhaps a few items (including the yellow skeleton?) were salvaged and reinterred in WV-25 towards the end of the

(15) Carter (*et al*), *Tomb of Thoutmosis IV* (London, 1904).

(16) Martin, *The Royal Tomb at Amarna* Vol. I (London 1974).

(17) Carter, *Tomb of Tut-ankh-Amen*, 3 vols.

(18) Suggested by Thomas, *Royal Necropoleis*, p. 240. in addition to the fayence fragments from both tombs (cf. my note 13 above), Ay's tomb yielded a considerable quantity of wood fragments. Most of the latter were unidentifiable splinters, but among the recognizeable pieces were parts of some wooden *statuettes* (two beards, several hands and a leg), but nothing in the nature of the *lifesize statues* indicated by the ears and feet from WV-25. Neither tomb contained the remains of any canopic boxes or jars.

(19) In addition to the wood and fayence fragments already cited, WV-23 also yielded the lid of Ay's sarcophagus six gilt copper discs and indications that the doorway to "B" chamber (cf. plan in Thomas, *Royal Necropoleis*, p. 93, Fig. 11, no. 23) had been sealed. Parts of a human skeleton were found and are now packed together with the yellow skeleton from WV-25. Our untrained estimation of the remains from WV-23 is that they belong to an elderly woman.

New Kingdom. A propre medical examination of the human remains will enable us to know whether such a theory is feasible.

A pink granite sarcophagus fragment mentioned by Thomas(20) was located near the entrance of the tomb. It contains no decoration, but appears to be from the lid of a sarcophagus. (Plate VII). It cannot be from Ay's lid, for his lid (of red granite) was found intact in WV-23. No other pieces of such a pink granite lid are known to me. It may be an intrusive piece from some yet undiscovered tomb in the Western Valley.

The late New Kingdom burials were intact at the time of their discovery by Belzoni. The Roman sherds scattered among the materials associated with WV-25 were surely introduced after the opening of the tomb in 1817. Several bowls were reconstructible (Plate IIIb, nos. 6-7)(21) and one cooking pot (apparently unused) was pieced together from numerous fragments (Plate VI, B). Late Roman sherds were encountered in and near Ay's tomb and can also be seen atop the debris in WV-24 (22). Sometime in the fourth century A.D. (or even later) some persons made use of this corner of the Western Valley.

Except for a box of study materials now in one of the storerooms of the Antiquities Department in Thebes, the finds from WV-25 are being stored in Ay's tomb. The lack of deposits and inscriptional evidence leaves us without an definite means of identifying the original owner of the tomb. Subject to some modification upon completion of some studies yet to be undertaken, the following summary is offered :

(20) Thomas, *Royal Necropoleis*, pp. 83 and 289. Thomas refers to this fragment as "red" granite but because of its light shade we prefer to designate it as "pink" granite.

(21) The closest parallels which I have found to date for these two bowls are in Nagel, *Le Ceramique du Nouvel Empire à Deir el Médineh* (Caire, 1938), p. 116, Fig. 102, nos. 31-32.

(22) WV-24 is not of royal design. It was not part of our concession.

Late Dynasty XVIII-Tomb WV-25 under construction, of royal design, but never completed. If a burial took place at this time, it was not a very elaborate one and it was well plundered before the late New Kingdom.

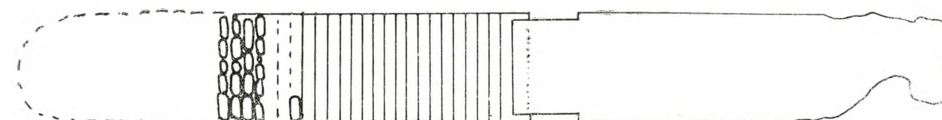
Late New Kingdom (*Dyn. XXI or XXII*)- Tomb was reused for the burial of eight bodies, one at least indicating a reburial, either an earlier occupant of WV-25 or possibly the remains from another tomb, Ay's most likely. If there was no earlier burial, the XVIIIth Dynasty materials were probably introduced at this time. With the interment of the eight mummies, the tomb was sealed and remained undisturbed until Belzoni's discovery of it.

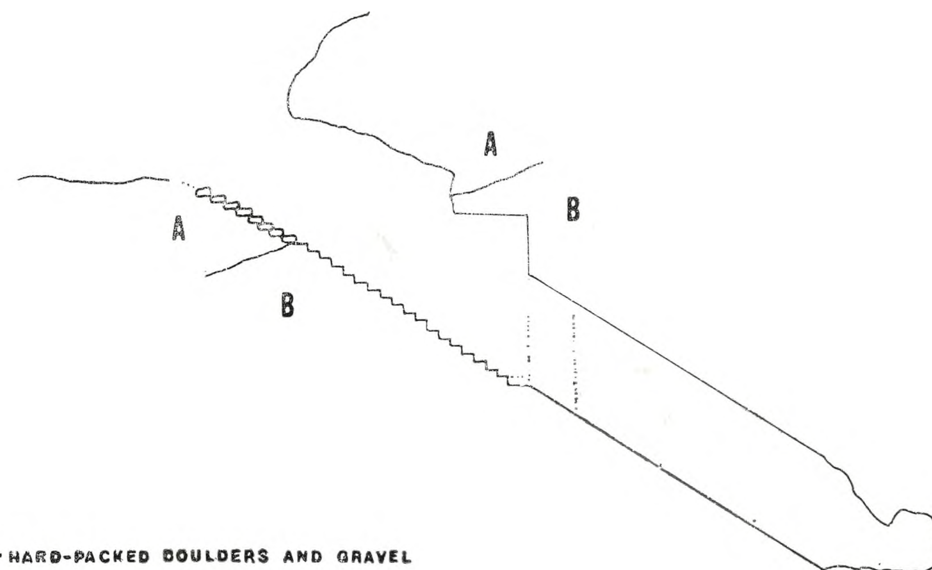
Otto J. Schaden

January 1976

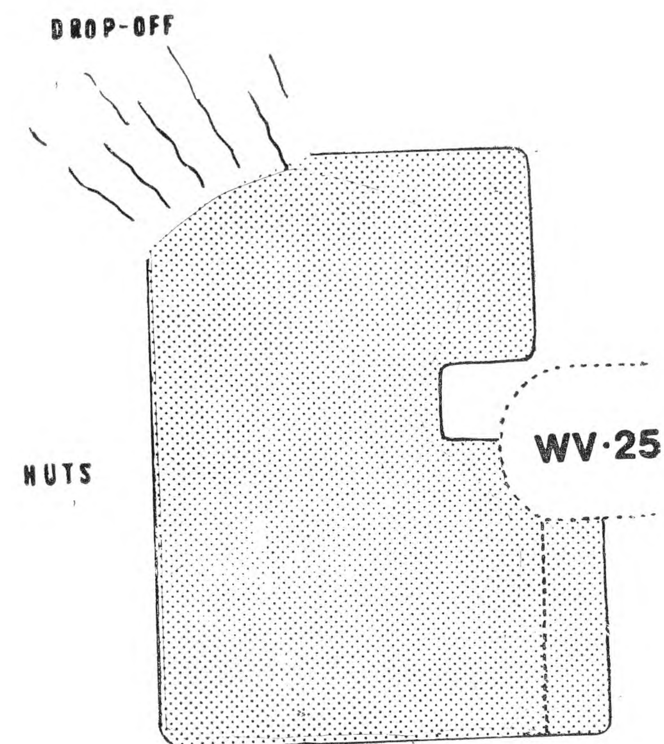
WV-25

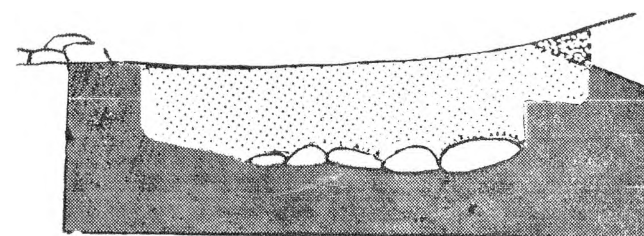
PLAN & SECTION





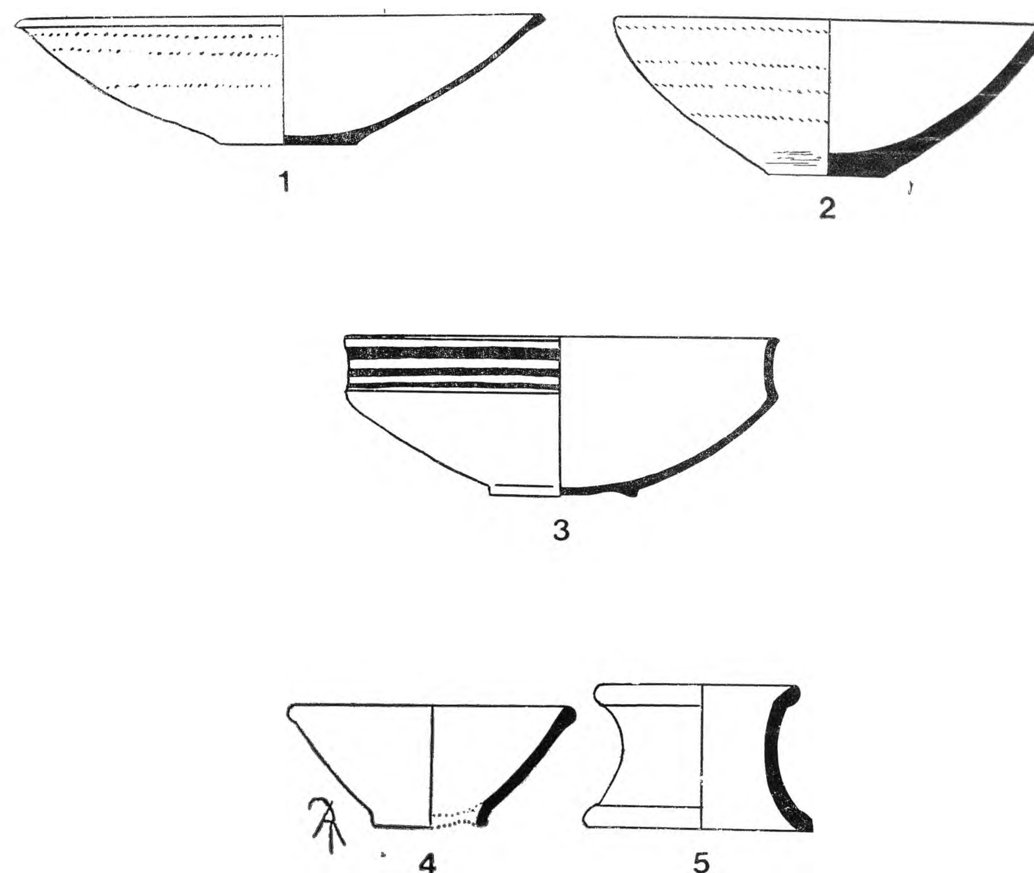
Plan and section of WV-25 adapted from the drawings of Ragai Zaki





5 M

Sketch indicating the area cleared in the search foı foundation deposits



Some examples of reconstructible pottery types. Numbers 1-5 are XVIIIth Dynasty :

No. 1 — redware, string-cut base, red paint on rim, three bands of impressed rope pattern on the exterior

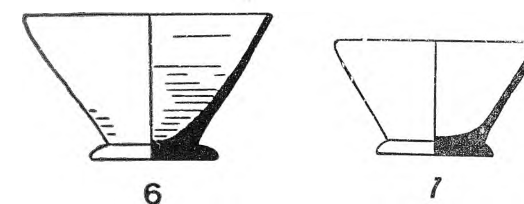
No. 2 — redware, string-cut base, four bands of rope pattern impressed on exterior

No. 3 — redware, ring base, three bands of red paint above carination and three red spots at intervals on the rim

No. 4 — Qena or Ballas ware bowl, ring base. Potmark

No. 5 — redware jarstand, cream slip or wash

SCALE 1 : 6



Numbers 6-7 are Late Roman or Coptic :

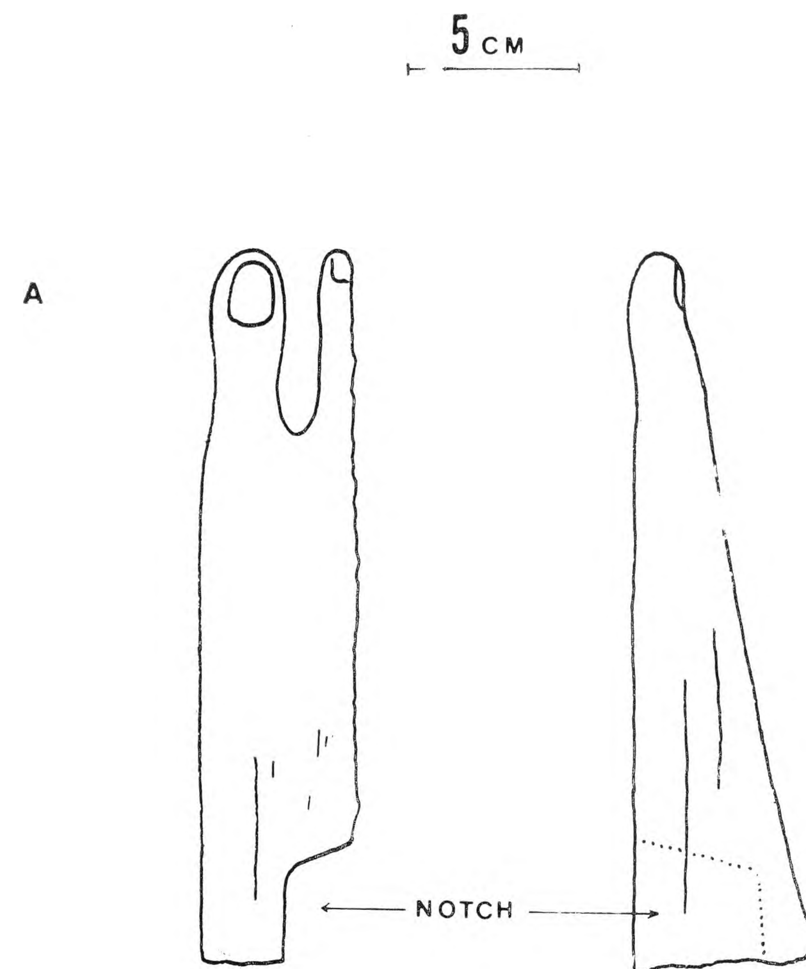
No. 6 — reddish brown ware bowl, heavy base (string - cut)

No. 7 — brownware bowl, heavy base (string-cut)



CA. 1:1

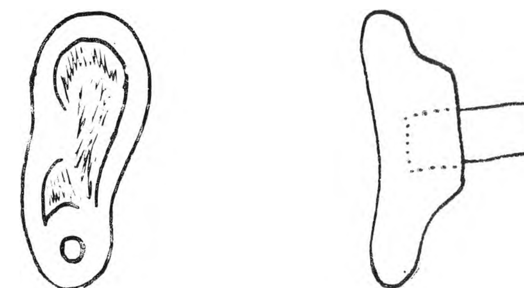
Sketch of seated man (in red on the original) on limestone flake, The flake itself measures ca. 17 x 17.5 cms. (width and height respectively); the total height of the drawing is 11.2 cm.



Fragments of the lifesize wooden statues :

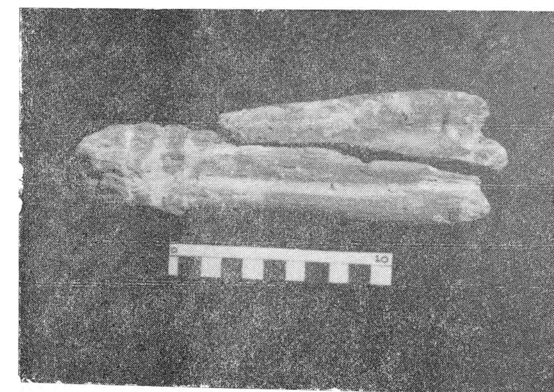
A : a top and side view of one of the right feet. The big toe is separated from the second toe, apparently in order to accommodate a sandal. The notching is for attachment to a base.

B



B : example of one of the left ears. Peg for insertion into the head is still intact on one of them. Of the two examples we have, one ear is actually pierced, while the other indicates piercing by an indentation.

A

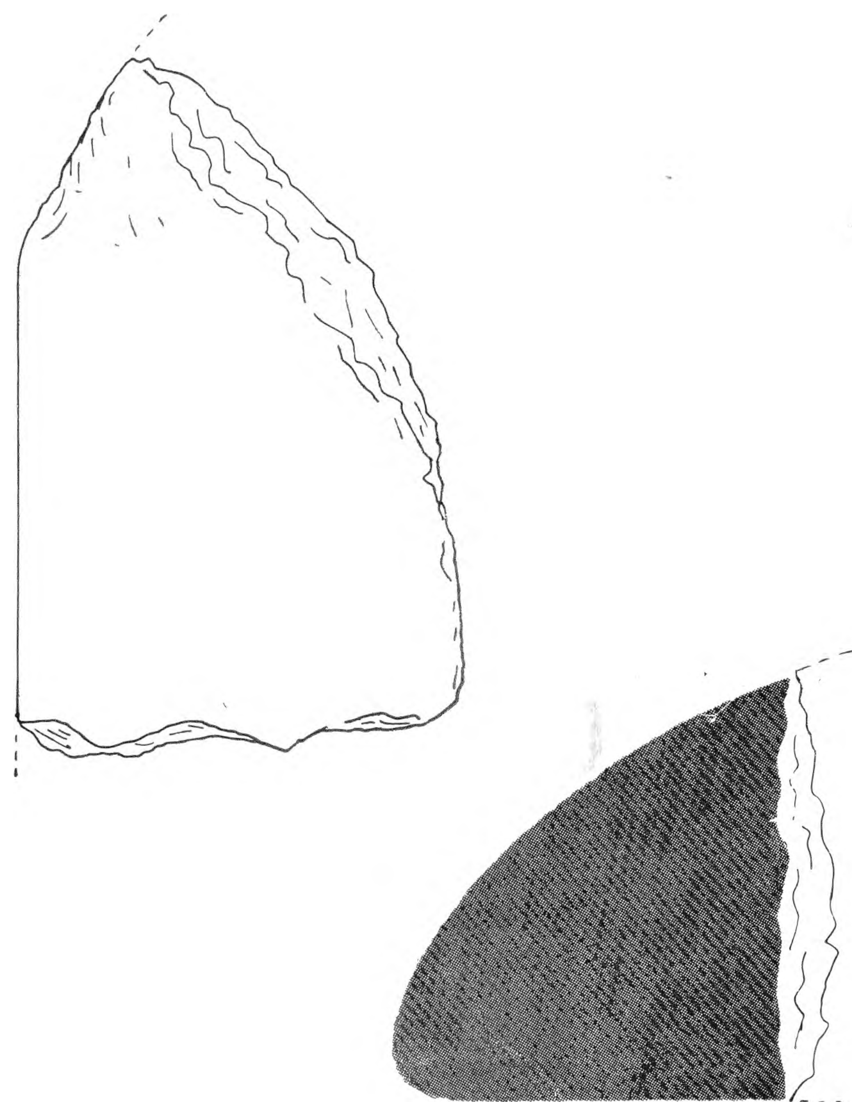


A : Photo of wooden object, most likely a flail. There is yet some red paint on the backside and some cloth adherring to the backside.

B



B : Photo of a late Roman redware cooking pot. Two handles. Reconstructed from numerous fragments.



Top and side view of the pink granite sarcophagus fragment. It appears to be a corner (or from near a corner) of a sarcophagus.

CLEARANCE OF A NEW KINGDOM CEMETERY AT EL-SHUTB (NEAR KOM OMBO TEMPLE)

BY

GALAL SHARAWI

The New Kingdom cemetery discovered at El-Shutb is about 2 km. to the South of Kom Ombo town and east of the Kom Ombo temple at about half a km.

This cemetery is close to the houses of El-Shutb village from north and west. The tourist road which connected the main Cairo-Aswan road to the Temple divided this cemetery into two parts, southern and northern part. The work took place in the southern part of the cemetery from 1965-1967.

It ended with the discovery of several tombs which, judging from their contents, should be dated to the New Kindgom, these tombs formed part of a big cemetery.

The tombs are numbered from No. 1 to LXX. according to the date of their discovery. Unfortunately most of the tombs which had been discovered were found plundered, but enough material rem.ined in them to allow their being dated to the N.K. Some of the tombs were reused in late period. The plundering of these tombs took place possibly in the Graeco-Roman or Coptic period, since some lamps of these periods were picked up in some of burial chambers.

New Kingdom tombs types found at the cemetery :

1. Long rectangular pit. Fig (1).
2. Circular pit. Fig. (2) plate II b
3. Rectangular pit with recess-chamber on side. Fig. (3) plate III a, b
4. Rectangular pit with two or more side chambers. Fig. (4) plate I a,b and II a

5. Stairway pit with chamber. Fig. (5) plate IIb
6. Rectangular pit with end-chambers. Fig. (6) plate v b
7. Rock-cut tombs with incline or stairway and small or large chamber. Fig. (7, 8, 9) plate III b, Va

The mummified body was enclosed in an anthropoid pottery coffin known as a slipper coffin, the face and the chest of the deceased is represented on the lid, some mummies were put in wooden coffins which are in a bad state of preservation, some mummies were in limestone coffins without painting and others were buried in the sand without coffins. The mummies were usually wearing necklaces, beads, amulets and scarabs. Scarabs were found with the bones of child such as men and women, sometimes a big scarab as a pendant, with a ring or in the chest.

The body lies in an extended position on its back with the head towards the west, the face upwards and the feet towards the east. Pottery were placed with the body, either at the head or at the feet and rarely at both head and feet. The two hands over the pelvis, if it is the mummy of a lady, the two arms are crossed on the chest, the right hand on the left one, if it is the mummy of a man or child.

The objects and contents found inside the tombs

I.—*Pottery, its types* :

1. Hard drab ware. Fig. (10).
2. Fine red ware. Fig. (11).
3. Hard red or brown ware. Fig. (12) plate VIa.
4. Red or brown ware. Fig. (13).
5. White ware. Fig. (14) plate VIb.
6. Coarse brown ware, one with hole in the bottom. Fig. (15) plate VI c.
7. Red polished ware. Fig. (16) plate VI d.

NEW KINGDOM TOMBS TYPES FOUND AT THE CEMETERY :

(I) LONG RECTANGULAR PIT.



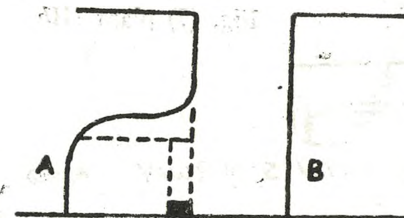
TOMB (5) FIG. (1)

(II) CIRCULAR PIT.



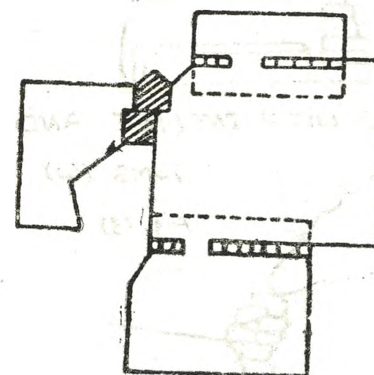
Tomb (19)
Fig. (2) plate II*b*

(III) RECTANGULAR PIT WITH RECESS-CHAMBER ON SIDE.



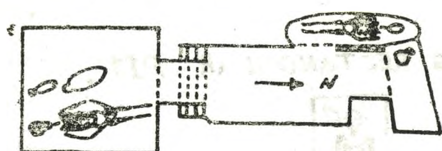
Tomb (50)
Fig. (3) plate III*a,b*

(IV) RECTANGULAR PIT WITH TWO OR MORE SIDE CHAMBER



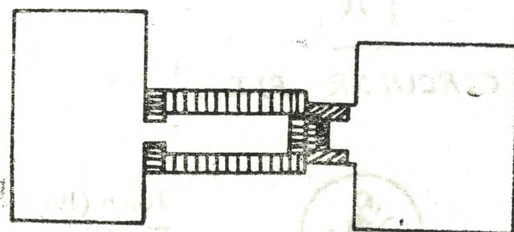
Tomb (17)
Fig. (4) plate I*a,b* and II*a*

(V) STAIRWAY PIT WITH CHAMBER



Tomb (40)
Fig. (5)
plate III*a*

(VI) RECTANGULAR PIT WITH END-CHAMBERS
Tomb (68) Fig. (6) plate V*a*

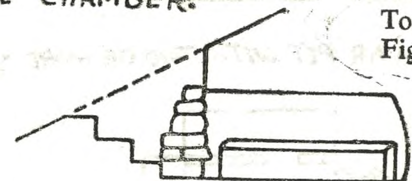


(VII) ROCK-CUT TOMB WITH INCLINE AND LARGE CHAMBER.



Tomb (43)
Fig. (7) plant III*b*

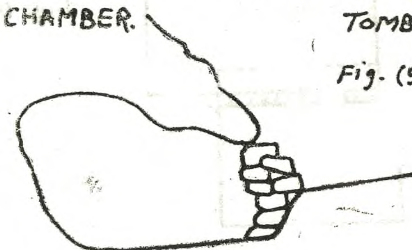
(VIII) ROCK-CUT TOMB WITH STAIRWAY AND LARGE CHAMBER.



Tomb (66)
Fig. (8) plaet V*a*

(IX) ROCK-CUT TOMB WITH INCLINE AND LARGE CHAMBER.

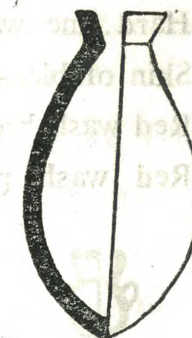
Tomb (41)
Fig. (9)



TYPES OF POTTERY FOUND INSIDE THE TOMBS



(1) Jars Hard drab Ware
Fig. (10)



(2) Jars Fine red Ware
Fig (11)

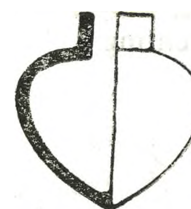




(3) Jars Hard red or brown ware
Fig (12)



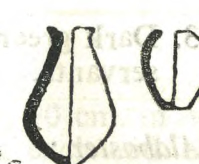
(4) Pot red or brown ware (13)



(5) Pot, white ware. Fig. (14)



(6) Pots: coarse brown ware. coarse brown ware with hole in the bottom. Fig. (15)



(7) Pot, red-polished ware. Fig. (16)

8. White ware with red decoration. Fig. (17)
9. Hard fine ware or paste. Fig. (18).
10. Skin of black paste. Fig. (19).
11. Red wash brown ware. Fig. (20). plate VI e
12. Red wash polished. Fig.(21).



(8) Pot, White Ware with red decorations. Fig. (17)



(9) Pot, Hard Fine Ware or Paste, Smoothed Fig. (18)



(10) Pot, Skin of black Paste. Fig. (19)



(11) Dish, red wash brown ware. Fig. (20)



(12) Dishes, red wash polished. (21)

II.—*Skawabti-Figures* :

1. Limestone shawabti-figures representing servants.
2. Rough clay small figurines representing servants.
3. Dark green-glazed rough figurines representing servants.

III.—*Alabaster* :

1. An alabaster jar with bulging base.
2. Alabaster kohl pots.

IV.—*Scarabs* :

1. Group of green-blue-glazed faience.
2. Group of green-glazed steatite.

V.—*Groups of beads and amulets. plate* VII.

VI.—*Groups of shells in different sizes and forms.*

VII.—*Skeletons and skulls* :

1. Skeletons and skulls of men, the two arms are crossed on the chest, the right hand on the left one and sometimes the arms in an extended position.

2. Skeletons and skulls of women, the two hands over the pelvis and sometimes in an extended position.

3. Skeleton and skulls of children, the hands in the same position of men and women.

VIII.—Groups of birds and crocodiles mummies.

IX.—Groups of destroyed painted and coloured cartonnage.

X.—*Coffins.*

1. Pottery coffin known as a slipper coffin 6 ins long, 1 ft. at a depth, the face and the chest of the deceased are represented on the lid,

2. Sandstone coffin without painting.

3. Wooden coffin in a bad state of preservation.

Below is a brief description of the most completely important tombs :

Tomb No. 17. Fig. (4), plate Ia and IIa.

Rectangular pit 275 cm. in length, 90 cm. in width and 400 cm. in depth, with chamber at each end, chamber doors roofed with true vault of brickwork, south chamber 400 cm. in length, 320 cm. in width, north chamber 450 cm. in length, 370 cm. in width, height, originally about 70-100. cm.

Tomb No. 40. Fig. (5), plate III*a*

Rock-cut tomb with incline and large chamber, sealing of stones still in position, floor limestone debris 50 cm. deep at door full with groups of crocodiles and birds mummies.

Tomb No. 43. Fig. (7), plate III*b*

Rock-cut tomb with stairway and irregular rock-cut chamber 300 cm. in length, 200 cm. in width, 80 cm. hight, slipping entrance passage, doorway blocked with stones, plastered on outside with mud.

Tomb No. 50. Fig. (3), plate IV*a,b*

Rectangular pit 200 cm. in length, 90 cm. in width, 300 cm. in dipth, with an irregular room opening out of the southern end. The chamber an irregular room is about 700 cm. in length, 500 cm. in width, 100 cm. in height, had been excavated in the softer lower alluvial stratum, and the roof had fallen in, making a dome reaching to the bottom of the hard upper stratum. The eastern wall of the chamber had been broken.

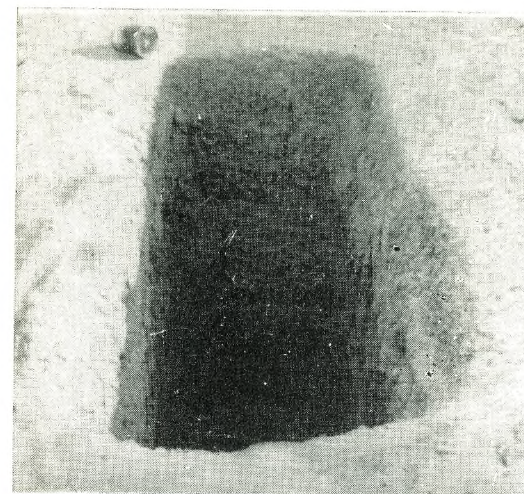
Tomb No. 66. Fig. (8), plate V*a*

Rock-cut tomb with incline and small chamber 200 cm. in length 80 cm. in width, 250 cm. in depth, sealed with stones which seem to have been moved and replaced in ancient times.

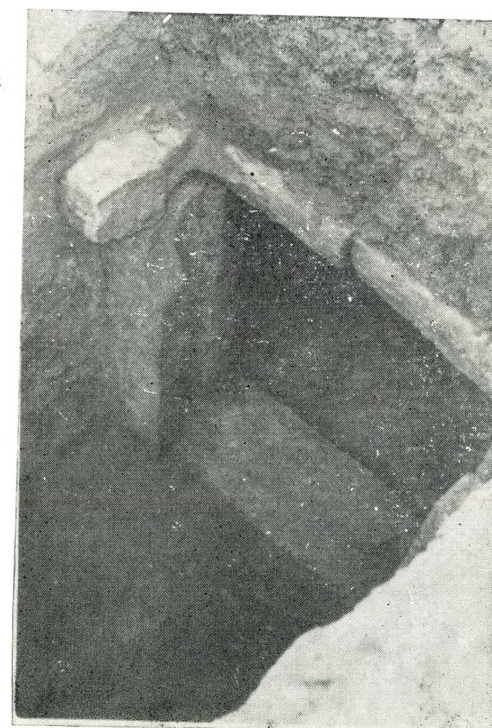
Tomb No. 68. Fig. (6), plate V*b*

Rectangular pit lined with brick, inside dimension 285 cm. in length, 95 cm. in width, 400 cm. in depth with a chamber at each end. chamber doors roofed with true vault of brickwork. South chamber 650 cm. in length, 550 cm. in width. North chamber 550 cm. in length, 550. cm. in width. Height originally about 80-100 cm.

GALAL SHARAWI



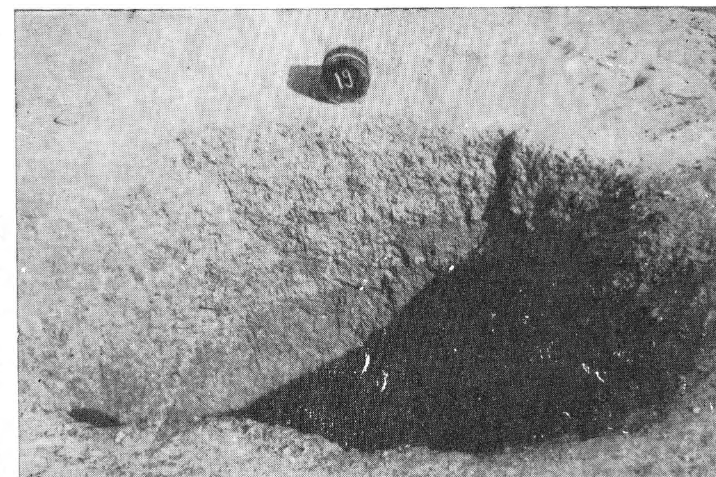
a) Tomb 17



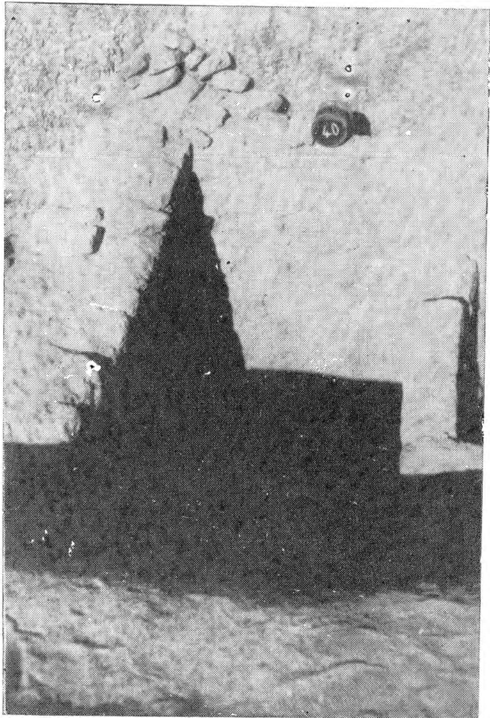
b) Tomb 17



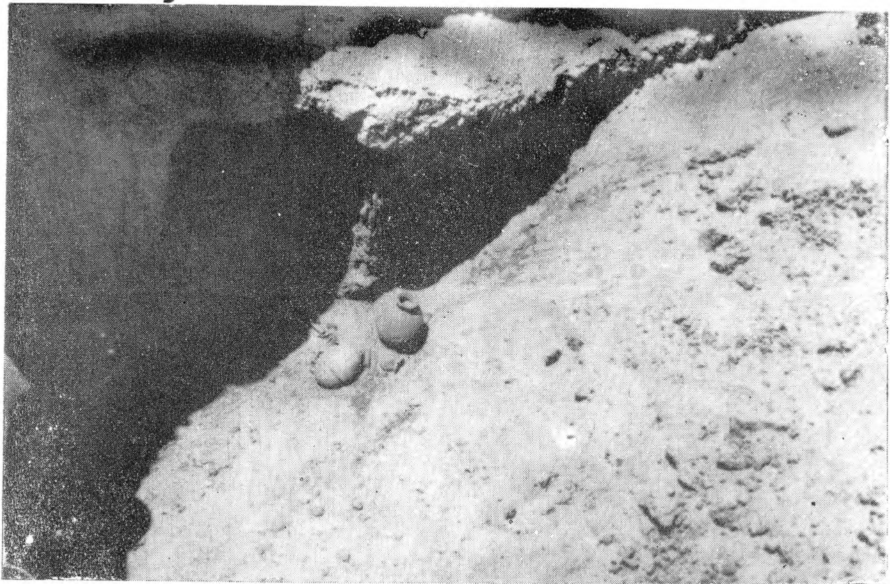
a) Tomb 17



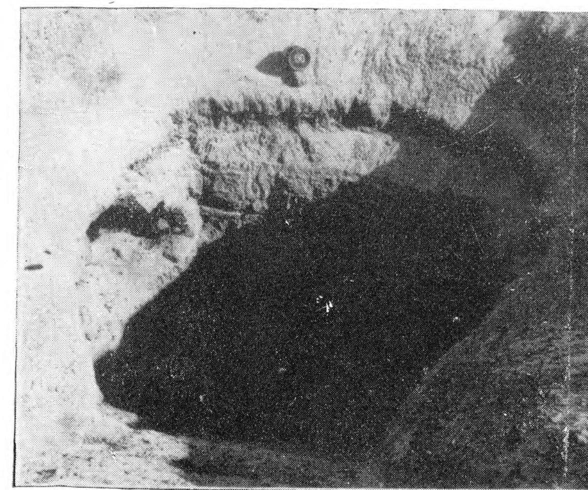
b) Tomb (19)



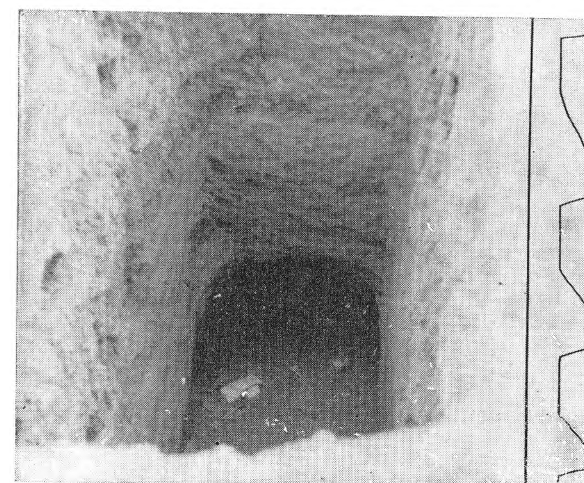
a) Tomb 40



b) Tomb 43

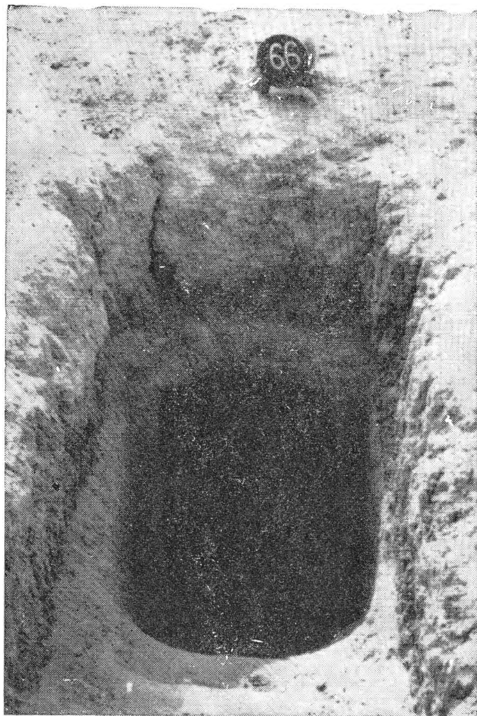


a) Tomb 50

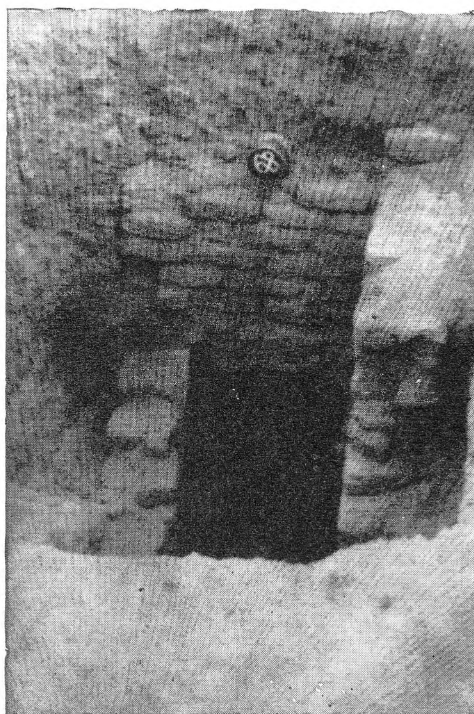


b) Tomb 50

Pl. V



a) Tomb 66



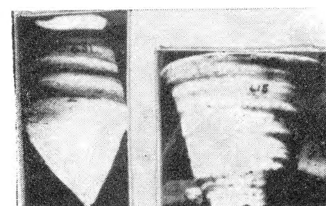
b) Tomb 68



a) Hard red or brown ware



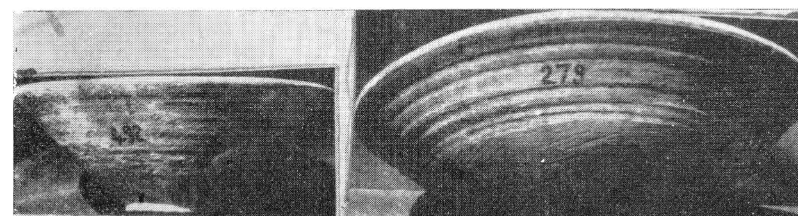
b) White ware



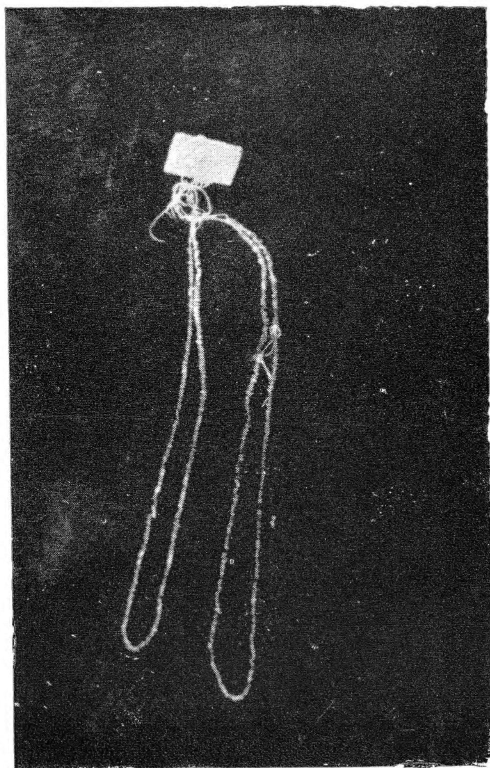
c) Coarse brown ware, coarse brown ware with hole in the bottom

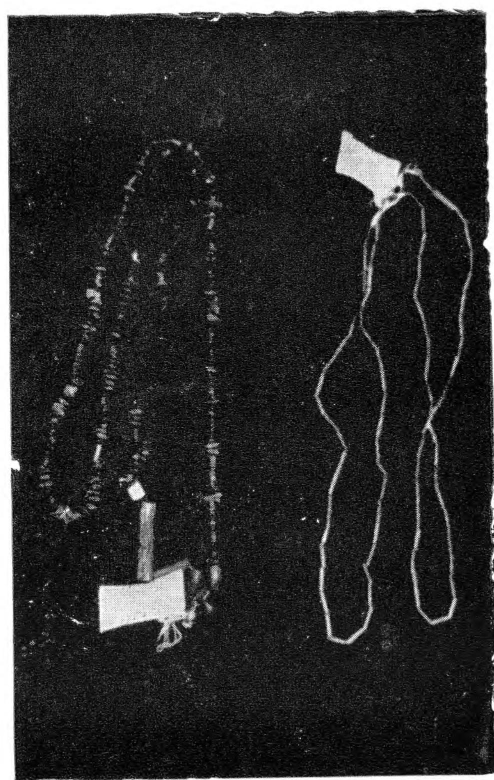


d) Red-polished ware



e) Red wash brown ware





Groups of Beads and amulets.

Pl. VII

A GRAECO - ROMAN BATH AT TELL SERSENA[1]

BY

FATHY MELEK WASIF

In autumn 1966, the excavations undertaken by the Service and supervised by me at Tell Sersena, [2] Markaz el-Shohada, Menufeyyeh Governorate, yielded a Graeco-Roman bath. This bath is considered to be a typical Graeco-Roman bath, since it contained all the principal elements and details of early Greek baths, together with late additional parts of the Roman Period. The main parts of the bath discovered, can be classified from west to east as follows :

The Hypocaust

Fortunately enough, there are sufficiently remains of that part of the bath. It is oblong in shape, measuring 8 m. 40 cm long, lm. 30 cm. wide and 70 cm. deep. There are five furnaces with arched apertures, two in the north and north east corners and three in the south and south west corners. All of them were open to permit the heat to go through that corridor (*suspensura*) (see pl. 1). communicating with all furnaces. That heat corridor was covered with double layers. The lower was made of oblong light brown slabs of burnt clay all found brocken, each of which bearing an incised Greek letter such as (₣ Λ A HN, Θ) [3]. The upper layer was made of oblong slabs of limestone. The fragments of the slabs were found in the débris of the corridor mixed with little pebbles and burnt material. The furnaces and heat corridor were fed with fuel through two apertures in the western wall of the *hypocaust*.

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(1) Thanks are due to Dr. El-Khashab, A. M. and Dr. Bakry, H. S, Who revised the article.

(2) That bath deserves to be added to the list mentioned an page 57, "Cahier N° 10" *ASAE*, by Dr. M. A. El-Khashab.

(3) The five chosen registered pieces measure as follows [32× 31]; [32×22], [32×31] [30×29), [32×36] cm with approx. thickness of 6 cm.

The Laconicum

Traces of two small semi-circular basins or seats with one step for each were found, measuring lm. 20 cm. by Om. 80 cm. Both of these two seats which were enclosed previously by red brick walls were erected directly over the furnaces. We believe that they were used as a hot air bath each, (the Greek function) ; and afterwards for the emission of hot vapour comming through tubes from the boilers in the distance between the basins later, during the Graeco-Roman periods. (1).

The Caldarium

It occupies an oblong area as a part of the tepidarium, limited with a narrow space(2) in the west, and two columns in the east. The Caldarium or the hot water bath, contains three basins. Two were Descensio and the third was a small cylindrical one :

A. — The first descensio which lies on the southern side is an oblong basin with two steps along the whole northern side, measuring 2m. 15 cm. long by lm. 87 cm. wide, but its depth varies from lm. 09 cm. at south west to lm. 27 cm. at north east because of the sloping base where a small opening of 7 cms. of drain goes beneath the floor of the tepidarium and joins the main channel of the waste-water. The base was made of oblong limestone slabs about 74 × 38 cm. The four sides of the basin were built of burnt bricks and plastered over with rough plaster. These four walls differ in thickness.(3) The remains of the two steps are still visible, the breadth of the lower is 21 cm., while the upper is 22 cm. The sides of this (piscina) rise from the floor of the *tepidarium* at a height of Om. 58 cm.

(1) According -o El Khashab, A. M. op. cit, p.

(2) Between the *Laconicum* and *Caldarium*, there was a space enough o 30 cm. wide to insert the heating tubes vertically, one over the other, so as to destribute the heat of the flames comming from the furnaces beneath to the *caldarium* and *tepidorium*.

(3) Eastern one 61 cm., where the northern 53 cm., and the western 30 cm. but the southern one was 43 cm.

B.— The northern descensio was square in shape in the early times of bath history, measuring 2m. 10 cm. But having examined the walls, I noticed that four walls had been added with triangel tops and bases in the four corners during late periods, so that the bath became octangular.(1) The depth here varies also from lm. 10 cm. north west to lm. 20 cm. south east on account of the sloping base where a small opening 6 cm. in diam. for drainage that runs beneath the floor of the *tepidrarium* and joins the waste-water channel. The base and the walls are also plastered over with a thick layer. The braedth of the two steps, which lie along the whole southern wall are so narrow and corroded in parts. The sides of this basin rise from the floor of the tepidarium at a height of Om. 37 cm.

C.— The Cylindrical basin lies between the two basins mentioned before. Its. diam. is lm. 05 cm., while its depth varies from Om. 50 cm. north west to Om. 54 cm. south east because of its sloping floor towards the drain-opening. The floor was made of small slabs of limestone nearly 39 × 30 cm. each. The circular sides were built of red bricks and plastered over with a thick layer, but they do not rise higher than the floor of the tepidarium. I believe that it was built especially for babies.

The Tepidarium

It was a hall for moderate temperature, where bathers assembled. It is an oblong hall measuring 12m. 10cm. long, 4m.. 25 cm. wide , Its floor was made of large slabs of limestone either oblong or square in shape. The roof was supported on eight columns.

The Apoditerion

On both northern and southern sides of the *tepidarium*, two oblong halls were discovered. These form the

(1) Their wjdth were as follows : 79, 88, 93, 93, 92, 87, 93, 85 cm.

Apodyterion where the bathers took off their clothes, stayed for rest, waited for their turns and listened to music. The southern hall measures 5m. 40 cm.long, and 2m. 65 cm wide. The three walls of this hall were obviously thick. On examining their remains, I found that they were built of burnt brick with a layer of plaster about 13.8 cm. thick to be used as benches when the number of bathers later increased.

Fresh Water Main Source

Ine reality, there is a long distance between Sersena and Zawiet Rozain (1). So, it is unbelievable that our bath was provided with any type of public aquaducts which were usually erected in great cities. Thus while I was examining the area around the bath, I found a great well of brick 7m. in diam., in the north-west angle of the bath. It was dug directly beneath an oblong receptacle which rose 3m.89 cm. from the mouth of the well. The thickness of the circular walls was 75 cm. I suggest that the water might be lifted up to the receptacle by means of a *shaduf*

The receptacle looks directly over the main wall. It was oblong in shape, measuring lm 10 cm long × Om. 56 cm. Wide. At the end of the eastern wall, an opening 39 × 33 cm which permits the water to go through an oblong great reservoir measuring 3m,32 cm. long by 2m.15 cm. wide was found. The walls fo this reservoir were built of red bricks plastered like the floor with a thick layer. It is not possible to tell how high those walls were; but their remains rise to a height of lm.17 cm. At the end of the southern wall, a circular hole of 7 cm. in diam. was found ; from it a pottery (or metallic) water pipe ran to distribute fresh cold water to the boiler and probably to the *frigidarium* which was completely destroyed.

(1) The capital of the *4th* nome in Delth, see Porter and Moss IV, page, h7.

Drainage System of Waste Water

The drain begins from the south-west corner of the bath with an arched aperture Om. 45 cm wide × Om. 62 cm. in height beneath a small chamber that leads to the *apodyterion* from south-west corner That room might have been used as a sort of a *frigidarium* during early times. The channel stretches nearly two metres beneath the *Apodyterion* and turns northwards to run under the *Tepidarium* where it carries off all the waste water of the basins of the *caldarium* At last, the channel turns to the north-east and opens outside the bath where it joins another channel leading waste water from the *latrina* placed 4 m.50 cm. to the east of the bath The two channels give access to an oblong arch designed for inspection, measuring lm.80 cm, long × lm.05 cm. wide, and 1m.50 cm deep, and opens to the north where the collected waste water goes down a sloping ground beneath, through another channel for a distance of lm 20 cm. to the west and lm.30 cm. to the north, then turns and goes about 6m. 50 cm. to the north east. The end of this outside channel has not yet been cleared.

Adjoining Jerry Buildings for Bath Workmen

After clearing the area that lies eastwards 18m. 50cm. by 9m., the bases of four columns were found ; this shows that there was previously a colonnaded court where some small oblong and square rooms of mud brick were added . I have the feeling that the entrance was designed to open directly over the end of the waste-water channel that runs beneath the *Tepidarium.* The colonnaded court seems to have been the centre of storing wine in amphorae (1) offered to bathers. These small rooms might be used as a lodging area for servants, fuel workmen and guards.

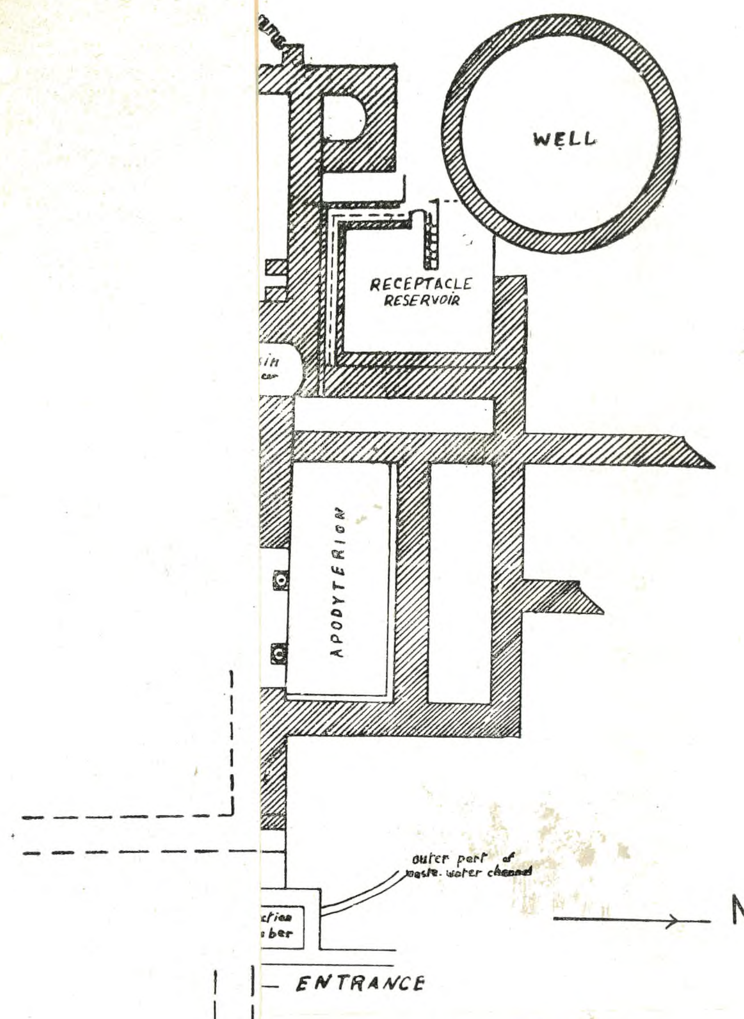
(1) That is due to the great quantity of sherds found in that place, besides various types of broken amphorae.

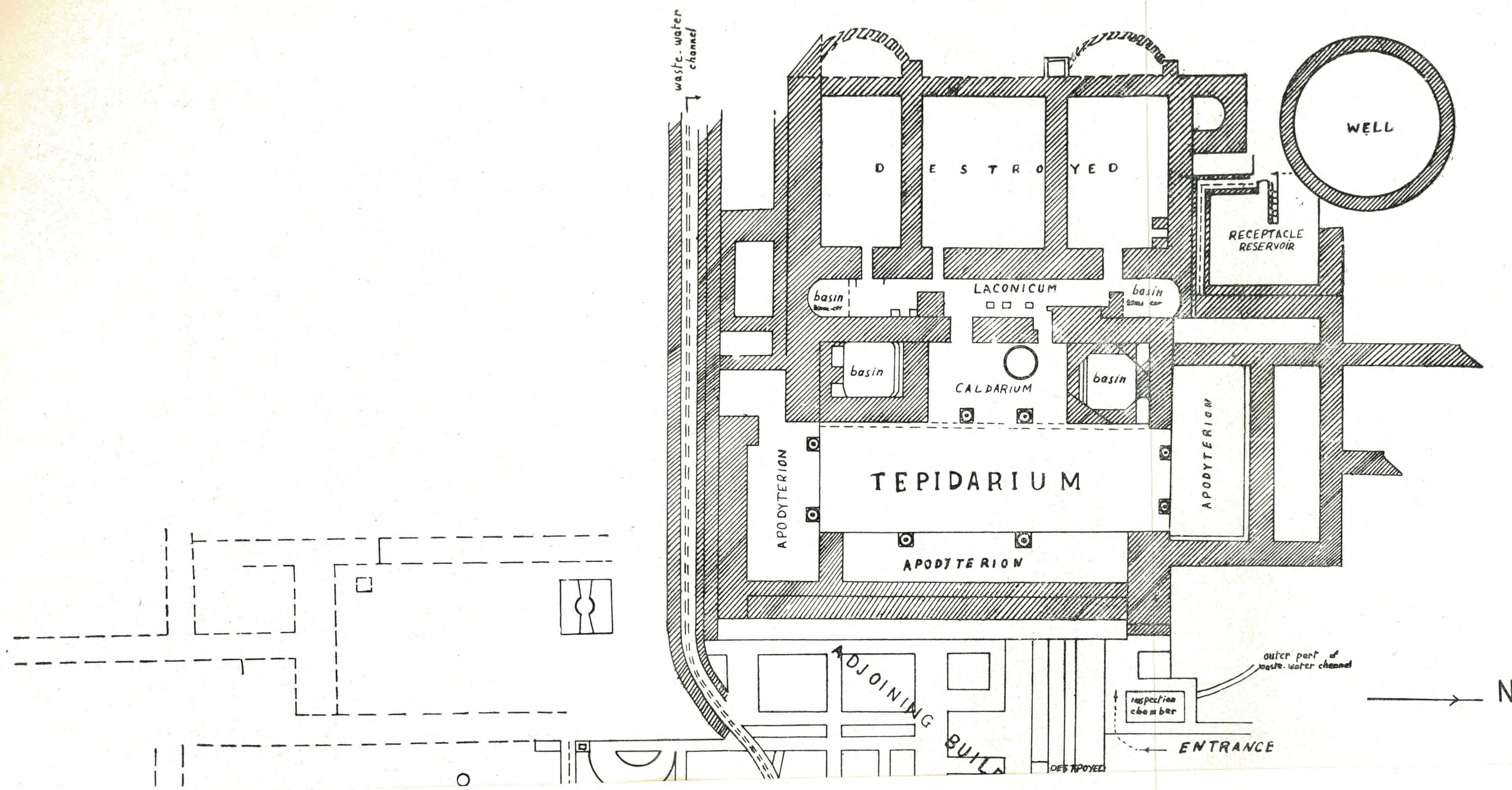
I have to add that the discovery of such a large bath in SERSENA, gives evidence to the great importance of the site during he Graeco-Roman period. Besides, it seems that the place had a strategical fame because of its position between the two branches of the Nile. The site was also chosen as a burial- place of the sacred bull Apis[2].

FATHY MELEK WASIF

(2) See Selim Hassan, *Nomes of Egypt during the Faraonic Periods*. P. 78

Pl. I




waste-water channel
D E S T R O Y E D
WELL
RECEPTACLE RESERVOIR
LACONICUM
basin
basin
basin
basin
CALDARIUM
TEPIDARIUM
APODYTERION
APODYTERION
APODYTERION
ADJOINING BUIL
outer part of waste-water channel
inspection chamber
ENTRANCE
DESTROYED
N

Pl. II



General view of the bath after excavations.



(Suspensura), and a vaulted aperture of one of the furnaces.

PL. III



Octangular descensio,

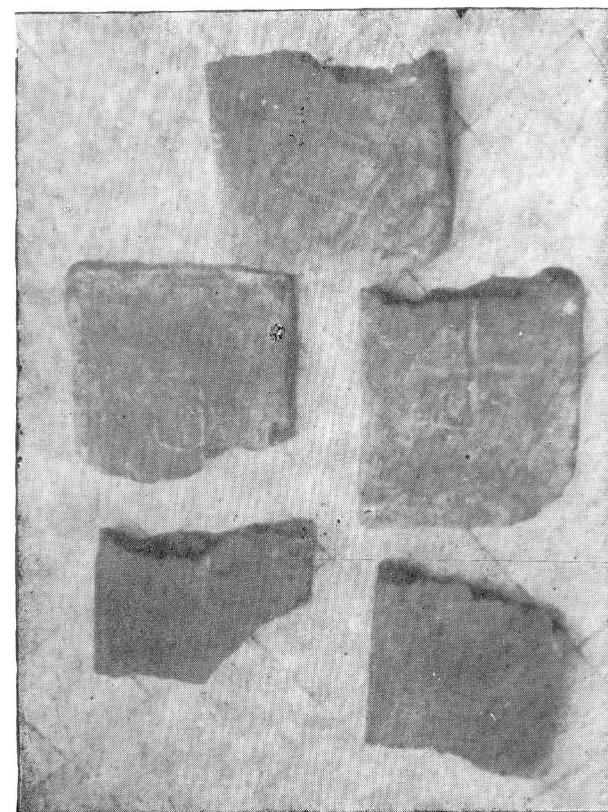
Pl. IV



Remains of the reservoir, (left).

Pl. V

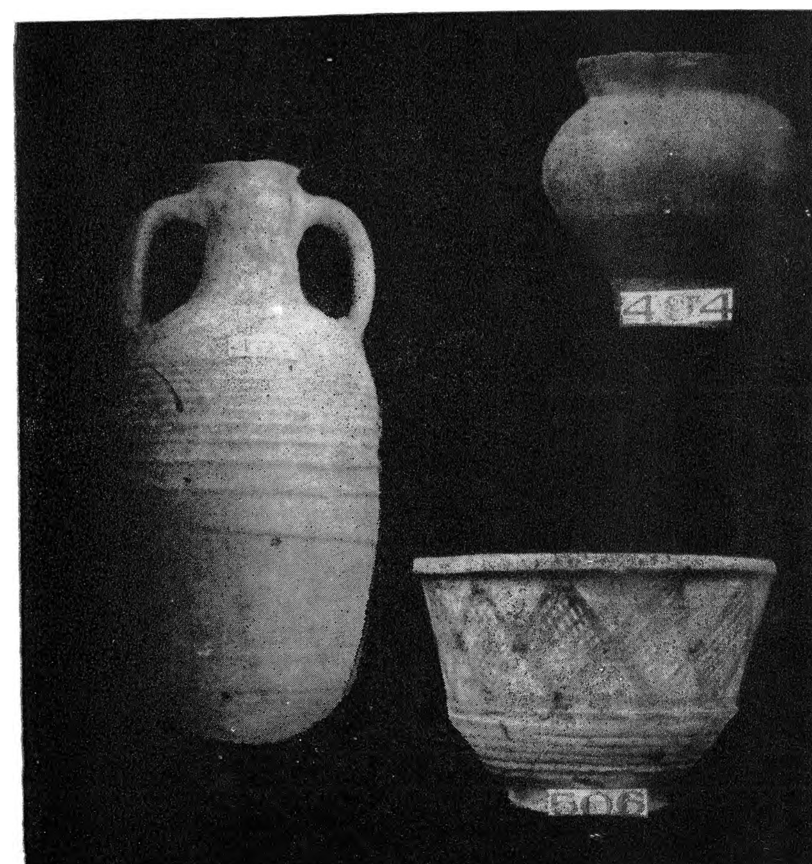
Pl. VI



Fragments of light brown slabs of burnt clay incised with Greek letters.



A Jar with a handle (492); and a model of a Corinthian Column apparantly a part of a shrine (489).



Models of pottery : 487—Amphura, 494—Jar, 506—bowl with coloured ornamentations in lozenges.



Two sides of a light blue glass-pot decorated with a symetrical unit of a bird and circles in relief.



A. A metalic cross with Lord, (514).

B. Pottery heating tube for distributing flames, (486).



Stone corniche with floral designs.

A HYMN OF RAMSES II AT ABU SIMBEL

BY

AHMED ABDEL-HAMID YOUSSEF

The hymn studied in this article, is the theme of a text engraved on the two stelae standing in the two recesses flanking the Great Temple façade on both ends of the terrace (pls. I, II). The text occupies the greater part of each stela under a panel depicting the king offering to various divinities with their legends before and above their heads.

Above the twenty-three-line south text, king Ramses II is seen offering to Amon-Re, Raharakhty and Horus of Ha. In the North stela, Ramses in a double scene divided by a column of his titulary, is also represented offering to Raharakhty the great god with thirty six lines below.

Both stelae are hewn in the live rock within a frame inscribed with the royal titulary. The south stela alone is surmounted with the winged sun-disk.

Published first by Lepsius(1) and available therefore to scholars, the south text had been recopied and translated by Guiyesse(2), then translated by Erman(3) in his "Literatur" as a good example of literary work he describes as "fine poem".

The North stela, published later in an undependable dim picture by Maspero(4) has kept hitherto—until the CEDAE's publication is available—out of study's reach.

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(1) L.D. II 195 a

(2) Rec. de Trav. X (1888) pp. 61-62

(3) Erman, Die Literatur des Ägypter (1923); translated by Blackman, reprinted under the title: "The Ancient Egyptians, a source book of their Writing" (New York 1966) p. 258 ff.

(4) Maspero, Rapport Relatif à la Consolidation des Temples pl. CLXVI.

Yet however, its first twenty four lines are practically a duplicate, with slight differences, of the south text. The remaining twelve lines can be considered as a separate eulogy on Ramses' mouth adressed to all his subjects.

The hymn is composed in short sentence - strophes giving the impression of verses ; each strophe is marked by the king's names and epithets at its end. The two versions of the hymn are here given in parallelism after the recent clear photographs, facsimiles and the in-situ multi-collated copies made by Černý and his colleagues on behalf of the Centre of Documentation on Ancient Egypt (1).

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(1) Op. cit.

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N [30]

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N [31]

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N [31a]

N [32]

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N [33]

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N [34]

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N [35]

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TRANSLATION

- Living(1) Horus, strong bull, beloved of Maat, Monthu of kings, bull of (his) mother, bull of rulers.
- Great of force like his father Seth of Nubty(2).
- The two ladies, protector of Egypt, subduer of all the foreign countries,
- (whose) fear of majesty is in all lands.
- who made Kush as never existed.
- who caused the land of Kheta to end its boasting.
- Golden Horus, rich in years, great of victories.
- who reaches the limits of earth seeking for fighting.
- who narrowed the wide mouths of the princes of foreign countries,
- King of Upper and Lower Egypt, Lord of the two lands.
- Usimare-setepenre, Son of Re who trampled the land of Kheta.
- Lord of diadems Ramesse-miamon given life,
- beloved of Raharakhty-Atum, Lord of the two lands, of Iunu Amonre-sonter,
- Ptah the great (who is) south of his wall, Lord of Ankhtawi, who shines on the throne of Horus of the living.
- Living good god, the mighty, the praised one.
- the lord in whom praises are, protector of his army.
- he who makes his boundaries on earth to his liking(3).
- Like Re who shines over the circuit of earth.
- King of Upper and Lower Egypt Usimare-Setepenre son of Re Ramesse-miamon given life.
- Bringer of the rebels as captives to Tamery.

— The princes laden with their tributes to his palace.

— the fear of him circulating in their bodies.

— Their limbs trembling by night and day (lit. "two times") through the terror of him.

— Lord of the two lands, King of Upper and Lower Egypt Usimare-setepenre, son of Re, lord of diadems, Ramesse-miamon.

— Trampler of the land of Kheta (the people of) which was made in a heap of bodies,

— Like Sekhmet(4) when tempestuous after pestilence

— He who throws his arrows against them, getting strong over their bodies. (5).

— The princes of all the foreign countries came forth from their lands.

— watchful without their sleep, invalid of their limbs.

— their tributes in a variety of the products of their land.

— their armies and their children in front thereof to beg peace from his majesty(6).

— King of Upper and Lower Egypt Usimare-Setepenre, son of Re, Ramesse-Miamon.

— their princes tremble when they see him.

— His strength and his might being like Monthu.

— when he spears(7) their heads like the son of Nut(8)

— He is like a bull, sharp of both horns, great of flesh(9).

— releasing (only) when he had finished with his enemies

— King of Upper and Lower Egypt Usimare-setepenre son of Re Ramesse-miamon.

— strong lion, sharp(10) of claws, lord of roaring.

— who hurls his voice in the valley of desert flocks.

— King of Upper and Lower Egypt, Lord of the Two Lands Usimare-setepenre, son of Re, lord of diadems, Ramesse-miamon

— jackal, quick of steps when seeking those who attack him.

— crossing the circuit of earth in a moment.

— divine noble falcon, furnished with wings(11).

— he who dashes into the small and the great, causing them to be unconscious of themselves.

— King of Upper and Lower Egypt, lord of the two lands, Usimare-Setepenre, Son of Re, Lord of diadems Ramesse-miamon.

— he who caused to recoil the non small enemies who fought on the battle field.

— they came, they broke their arrows which were thrown into in flames of fire.

— his might grew stong over them.

— like fire that has caught at plants (with) the wind (blowing) behind it

— like fire that has tasted of blaze(12).

— anyone who revolts against him turns into ashes.

— King of Upper and Lower Egypt Usimare-setepenre son of Re, Lord of Diadems Ramesse-miamun.

— the mighty ruler in destroying those ignorant thereof

— like a terrible tempest that roars in the sea.

— its waves like mountains.

— non can approach it.

— anyone who is in it sinks (13) into the netherworld.

— King of Upper and Lower Egypt, Lord of the two lands Usimare-Setepenre Son of Re lord of diadems Ramesse-Miamun.

— the king shining in the white strong crown of Fgypt.
— clever in fighting on the battle field.

— strong in battles.

— fierce fighter, stout of heart.

— he who gave his both arms as a stronghold round his army[14].

Lord of the two land King of Upper and Lower Egypt Usimare-Setecenres lcrdcf diadems Son of Re Ramesse-Miamum given life like Re.

— He says : listen to what I say to you [15].

— Ye all people, (ye) princes on earth, the entire troops.

— I am Re lord of heaven who is on earth [16].

— Who dces what is useful to you as he dces.

— I am an excellent protector to whom he listens. to whom he is withcut a rudder on sailing. no fault of mine came out[17].

— I sail on the waters cf my father[18].

I proceed on his ways[19].

— I (who) came out of (his) bcdy, I am equipped with strength and valour.

— keen, strong and sharp in fight.

— I came as a divine child established on his throne.

— one rejuvenates[20] at the sight of me.

— one rejoices at me like Horus son of Isis the beloved.

— one boasts of my sharpness.

— my name is like (that of) Lord of Thebes sharp.

— my paces penetrate the lands.

— I travel until I reach the wind[21].

The ignorant princes of the foreign countries come for me to Egypt.

— the rebels who are vigilant since the time of the gods kiss the ground for may ka.

— saying praises before me [22].

— They present tribute in front of me.

— they say *bawk bawk* (thy strenght, thy strenght) [23] like dogs...fear

stabs for me fire (belonging) to me [24].

— their hearts are fallen down (dḥ) in their bodies.

— my cwe entered through their members.

— my name had caused them to tremble like the Lord of Nubty[25].

— the vile land of Kheta lamented for them when they were down thrown.

— and their settlements demolished to the ground.

— their oases turned into flames...

— I plundered the land of Kheta as though it never existed (alone) by myself[26].

— I was alone, none other was with (me).

— King of Upper and Lower Fgypt, Lcrd of the two

lands Usimare-Setepenre, son of Re of his body beloved of him.

Lord of diadems Ramesse given life like Re eternally for ever.



NOTES

1. For the presence and reading of this sign, see ASAE XL (1940) p. 320, Receuil de Cryptographie Monumentale by E. Drioton who maintains that this sign is no more than a symbol not meant to be read. *cf.* Ch. Desroches-Noblecourt et Ch. Kuenz, Le Petit Temple d'Abou Simbel (Le Caire 1968) vol. I, p. 12, 131, n. 42.

2. In Egyptian Mythology, Seth was distinguished for his strength and valour ; *cf.* Pap. Chester Beaty I ; Gardiner, The Library of Chester Beaty (London, 1931) pl. 1-16, pp. 13-26.

3. *cf.* The Hittite-Egyptian Treaty, line 5 ; Bouriant, Notes de Voyage, Rec. de Trav. XIII p. 154.

4. *cf.* The Instruction of Sehetepibre ; Sethe, Lesestucke p. 68 ; Kuenz, Deux versions d'un Panegyrique Royal, in Griffith Studies p. 98.

5. For the second sentence *cf.* Doomed Prince 7,15.

6. The Hittito-Egyptian Treaty, ibid.

7. var. , to spear Wb II 170 ; the determinative represents an ignot of metal ; *cf.* Wb I 436 copper with various forms of determinatives. *cf.* Chassinat, Edfou VI (1931) p. 73, 1 6 : thy spear has cought his bones.

8. An epithet of Seth ; see note 2 above.

9. Faulkner, A Concise Dictionary of Middle Egyptian (1964) p. 12.

10. To be read here *nšm* : sharp, see Badawi-Kees, Handwörterbuch 129, *cf.* Wb. II, 339. This word is not to be confused with nš meaning "drive away" Wb. II, 337 which does not fit in the context.

11. *tm* 3. *t*, late for *dm* 3.*t* var. "wing".

12. an expression for great heat ; is a mistake for *ns*.

13. *hrp*, var. *h3 rp* to sink (in water) *cf.* Horus and Seth 13,9 ; to sink in the netherworld means to die or perish *cf.* op. cit. 15,4.

14. Pharaoh is usually described as a fortress *cf.* (Thutmosis III) A king who is strong, fortress for his army, wall of iron. Stela of Gebel Barkal, Helck, Urk. 1233 (Heft 17).

15. Read ; for plural second personal pronoun see Erman, Neuägyptische Grammatik § 76.

16. For the identification of the king with Re see Instructions of Sehetepibre *op. cit.* ; Desroches-Noblecourt et Kuenz, *op. cit.* p. 150.

17. *Sdm.* f form after the phrase *n wn* expressing non-existence ; Gardiner, Grammar § 188 ; see Faulkner, Dictionary, p. 10 ; *cf.* Urk. IV 151.

18. *i.e.* loyal to his father *cf.* Sinuhe B 75.

19. Sehetepibre instructions *op. cit.*

20. lit. turns green.

21. *i.e.* as far as the north wind blows meaning farthest south.

21. n ḥr for m ḥr *cf.* Lebensmüde l. 130 ff.

23. Imitating the barking of dogs by this repeated word "*bawk*".

24. to stab ; on the determinative see note 7 above. The notion of fire fighting for the king is also expressed in Thotmosis III's stela of Gebel Barkal see Helck, *op. cit.* 1230 ; Reisner ZÄ 69, p. 27.

24. See note 2 above,

25. Cf. , Kuenz, La Bataille de Kadesh (Le Caire 1928), Poème, line 144.

Pl. I





ADDITION TO ASAE. LXII, P. 103-120

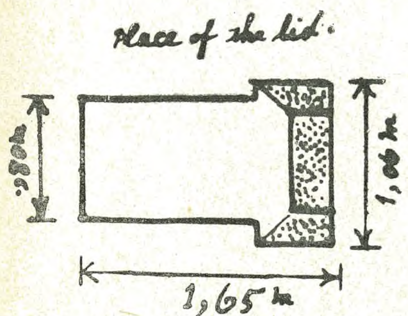
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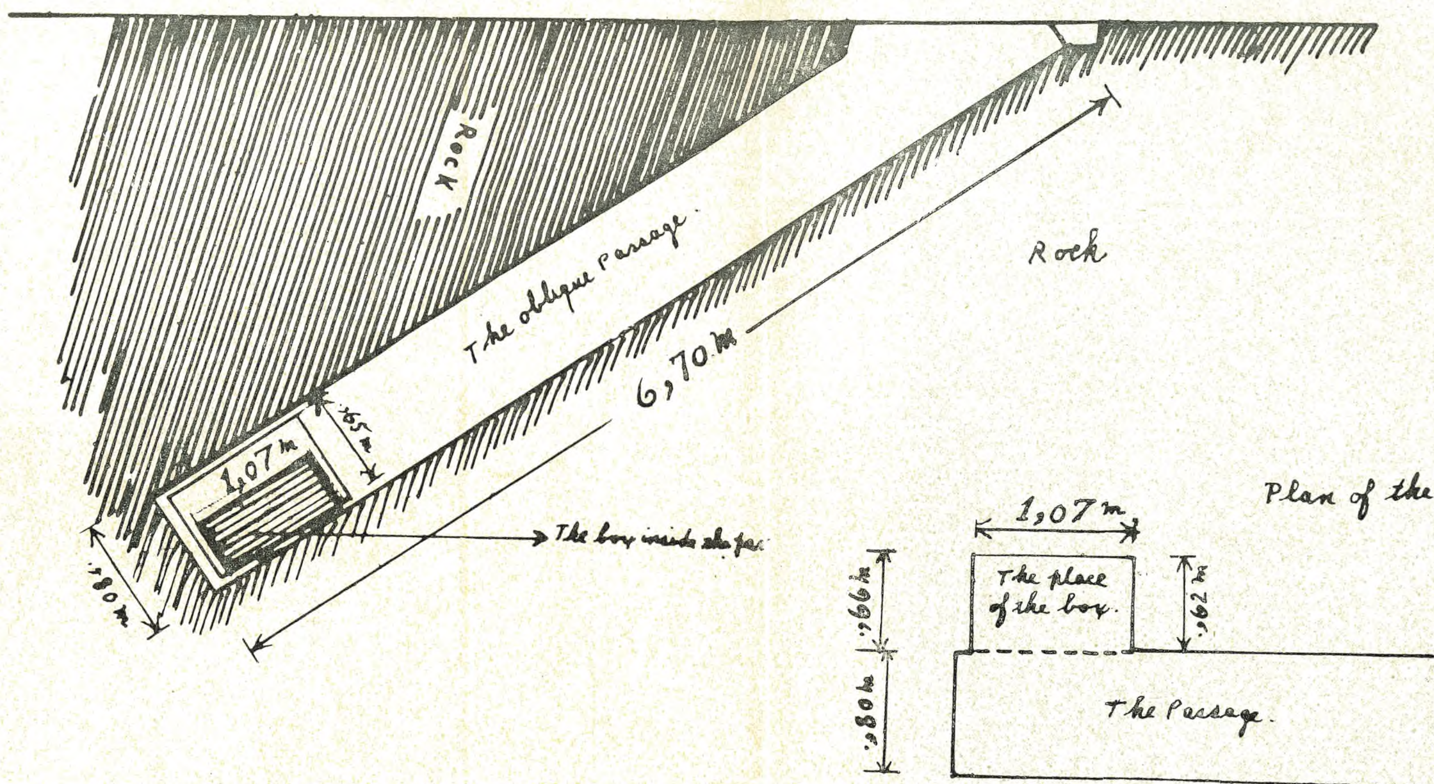
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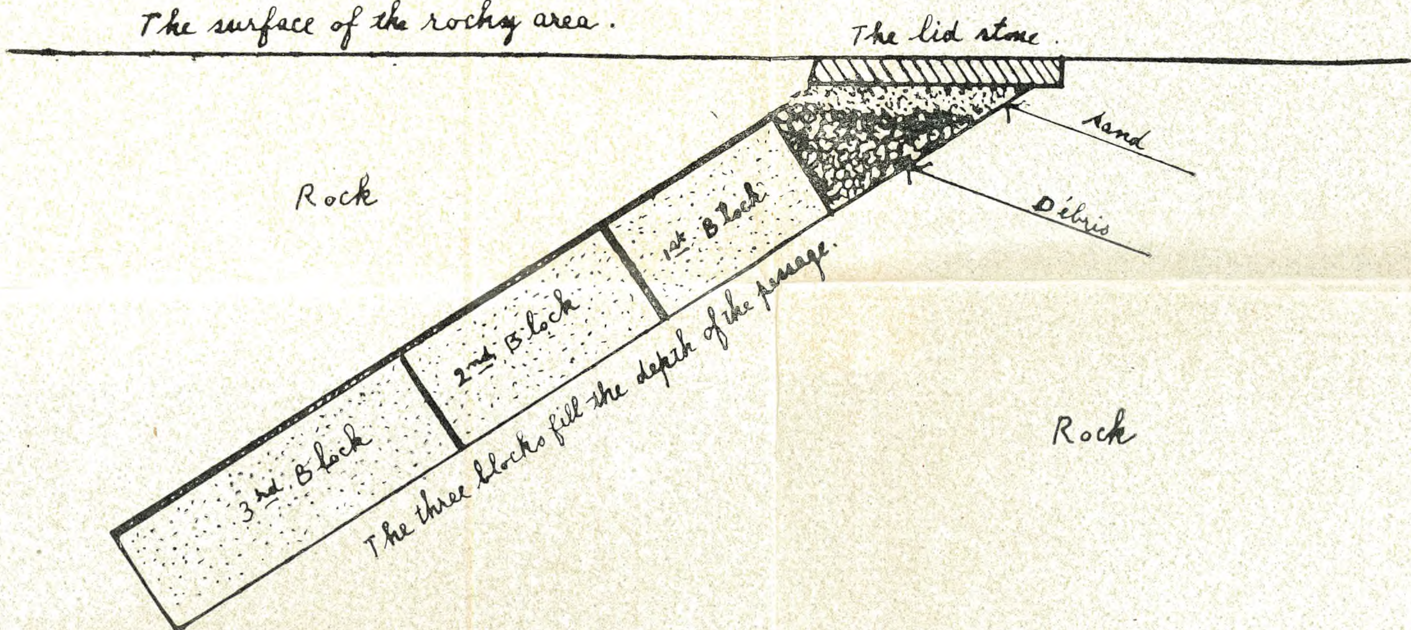
The Passage in which the Enigmatic Wooden Object was discovered beside the Second Pyramid.

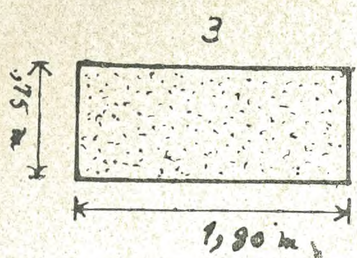
Plate I

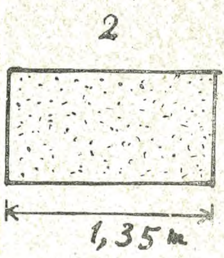
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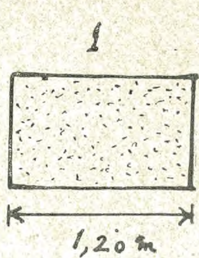




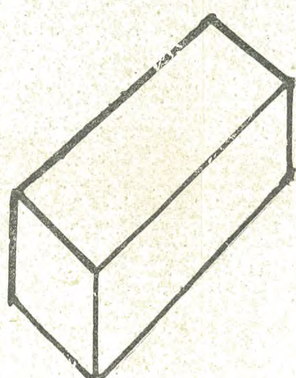








1 – 2 – 3 The three blocks.

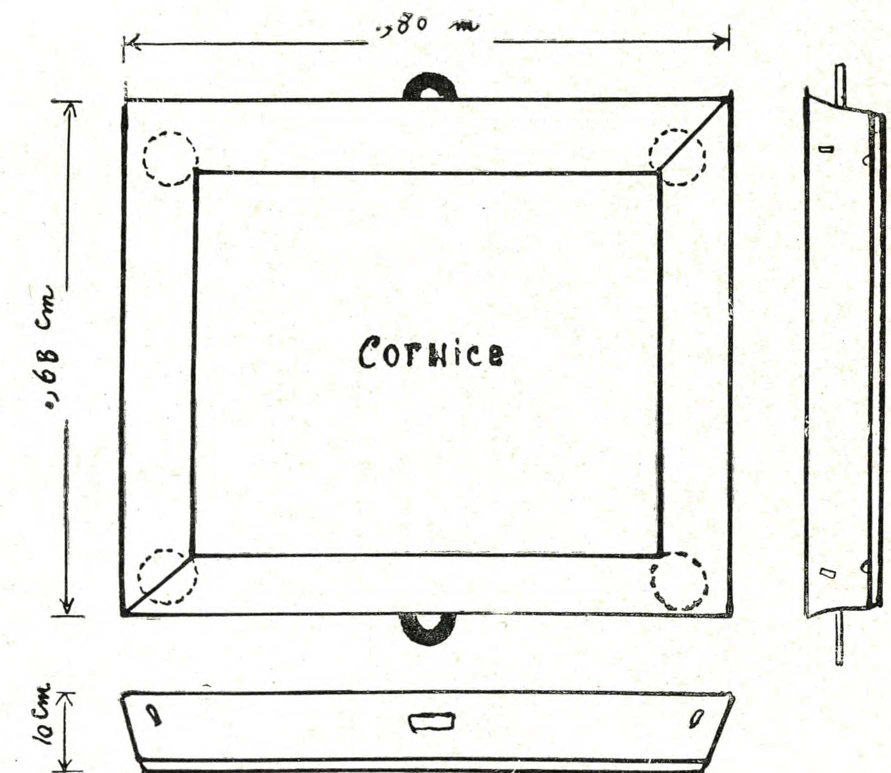


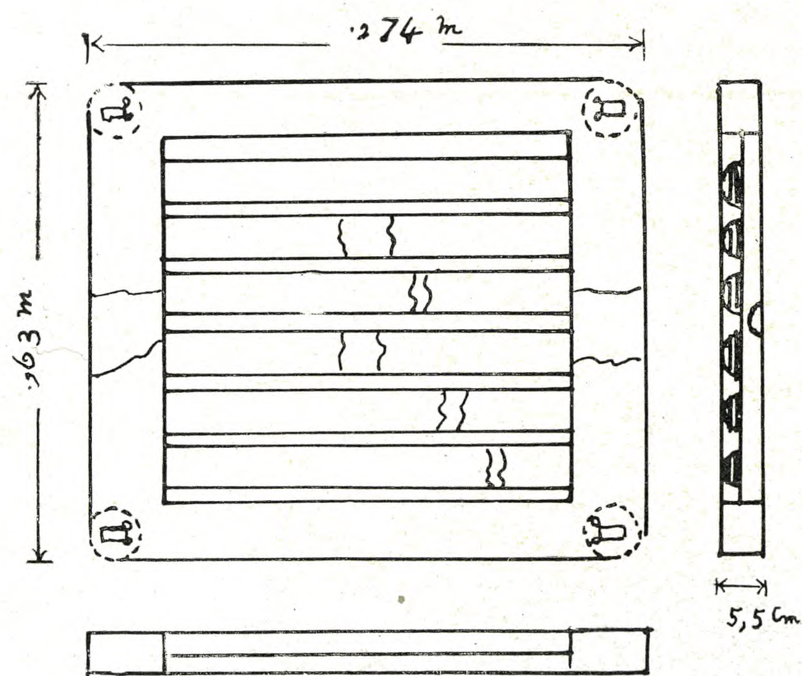
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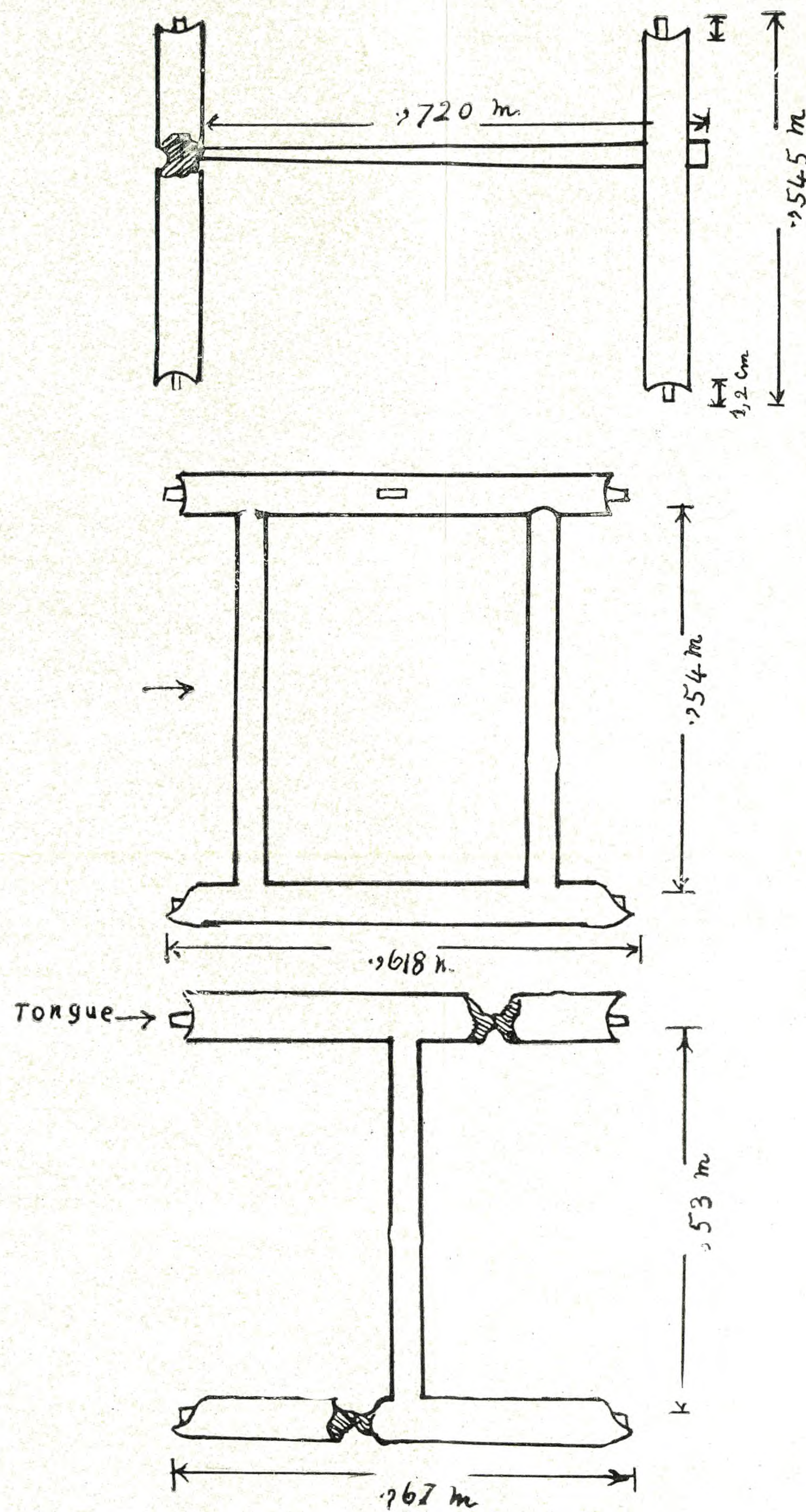
A. Hafez

Different parts of the wooden object.

Plate II. A



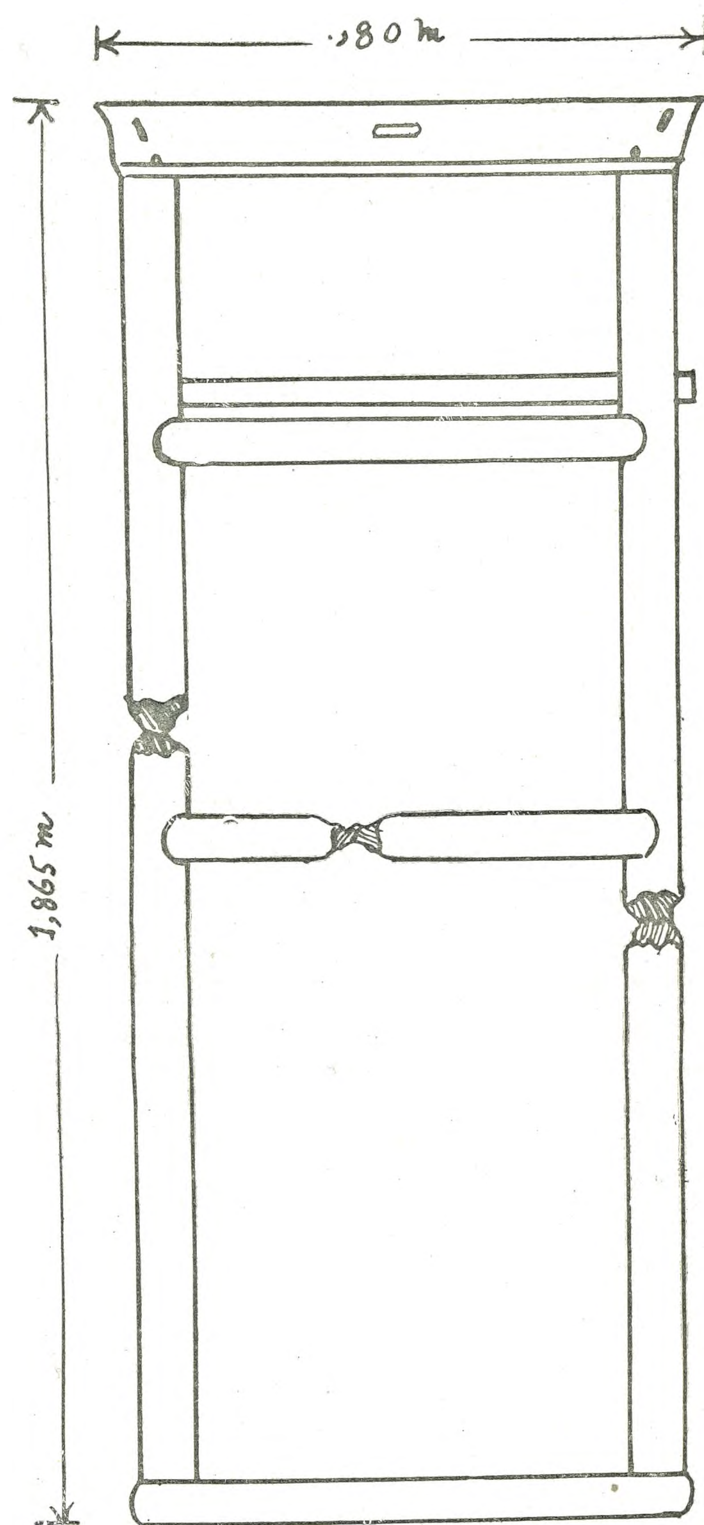




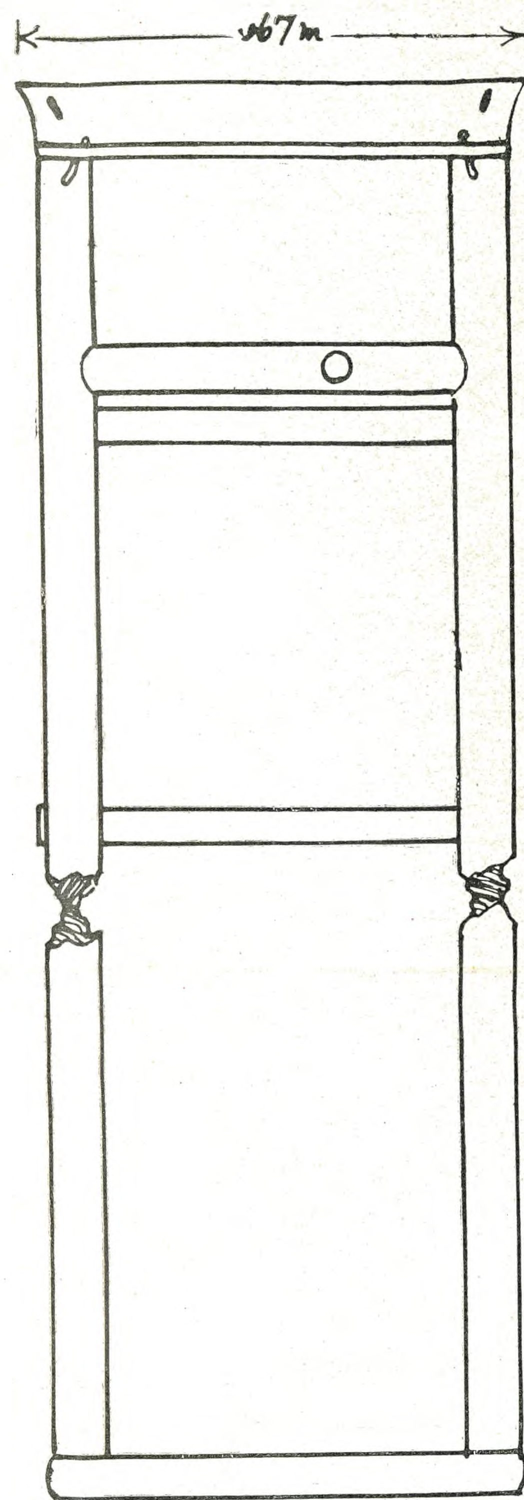
Pl. II a

Different parts of the wooden object

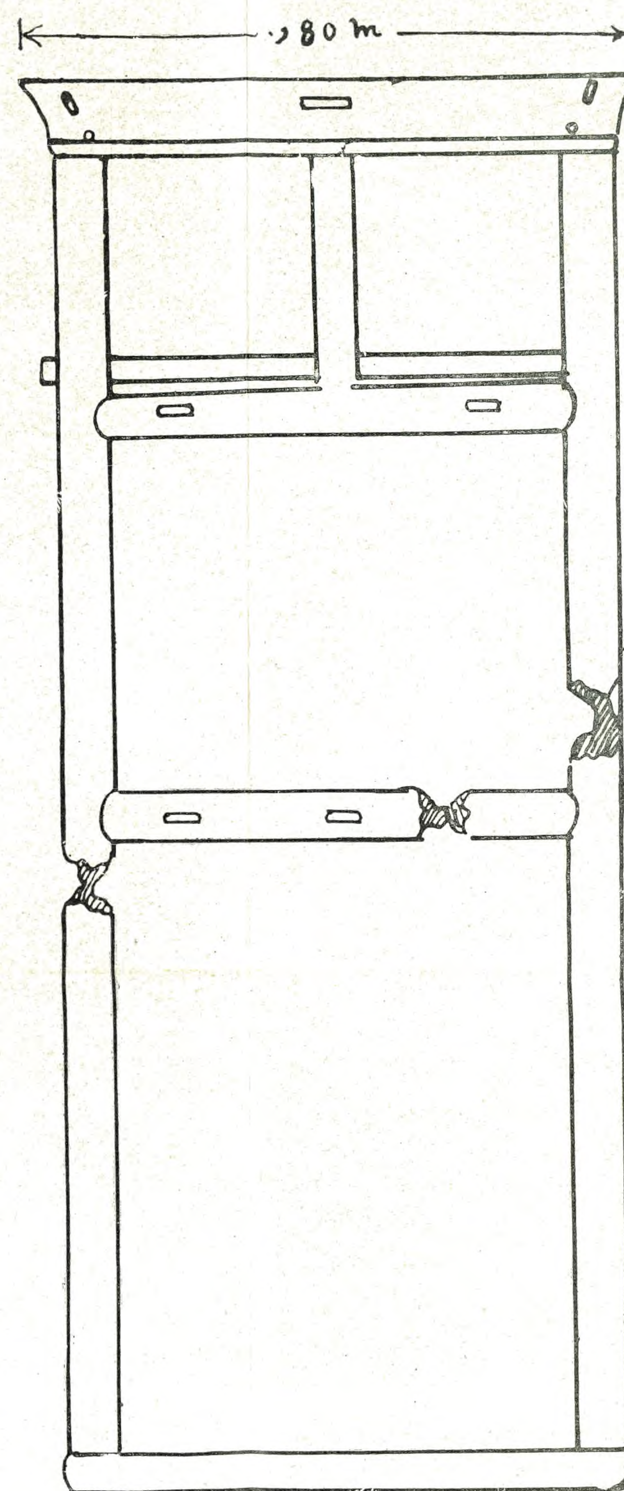
Plate II. B.



Face



Side



Back

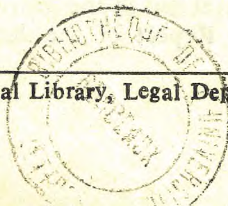
Pl. II b

A. Nofal

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